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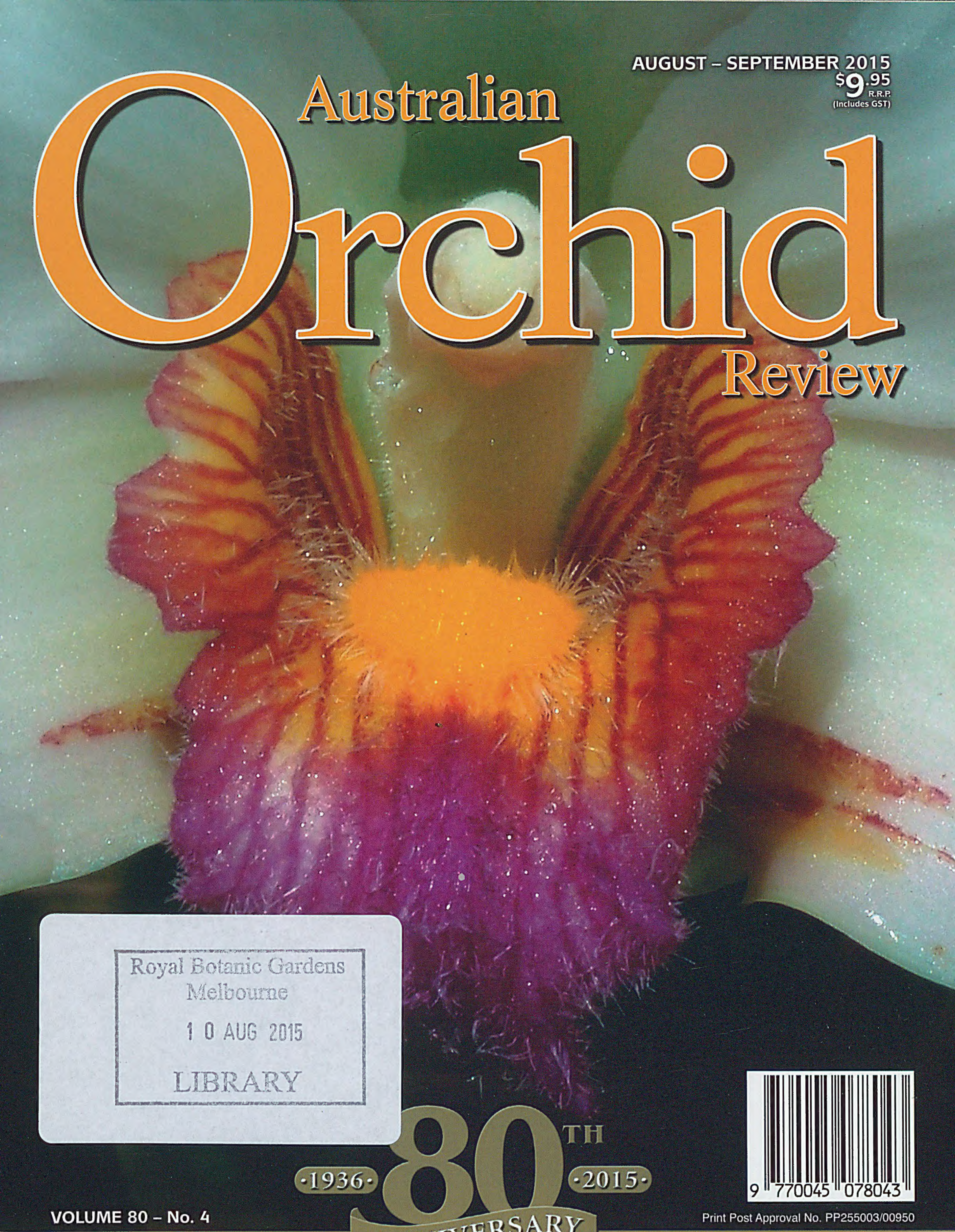

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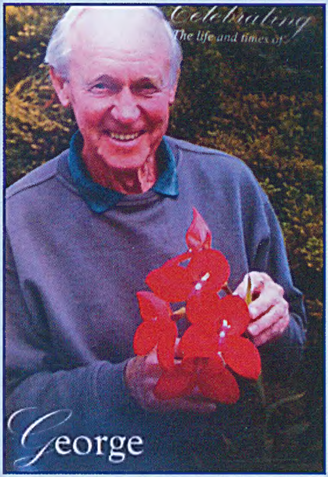
From the Editor's Desk

The genus *Bifrenaria* is a somewhat neglected genus in cultivation. Part of this could be because the most common species has the stigma of being a bit too common, and sometimes reluctant to flower. There are a group of very fine and showy members of this group of *Lycaste* relatives. In this issue, a number of easily grown species are showcased, as well as some of the floral variation within the genus.

Mr George Fuller MBE
(9 January 1929 – 19 June 2015)



Mr George Fuller MBE was THE Orchid Man from New Zealand. The ultimate gentleman - one of the nicest, most knowledgeable and most sincere personalities I have met in the orchid fraternity, and definitely a respected mentor. In orchids, he was a humble world leader in growing and breeding *Masdevallia*, *Pleione* and *Disa*. He was awarded an MBE (Member of the British Empire) for service to orchids and the community in 1990, even though George joked that it stood for "Masdevallias Before Everything"! An ace photographer, George's images dominated many orchid works, including the iconic *Encyclopaedia of Cultivated Orchid Species* by Hawkes and the *Growing Orchids* series of books by his late friend Jim Rentoul from Melbourne.

George's enthusiasm was infectious, and I enjoyed the numerous times we met and chatted (over almost two decades) at orchid shows, at his beloved Pukekura Park, enjoying his personal orchid collection at home, or showing me New Zealand native orchids in the bush. He was always encouraging and passionate about his orchids and life in general. If there were more people like George, the world would be a smarter, safer and more peaceful place today. I am very saddened to learn of his passing, and on behalf of the Australian orchid community, send our sincere condolences and respect to George's family and close friends. He was 86. We have collectively just lost one of the true giants of the orchid world.

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David Banks
Australian Orchid Review
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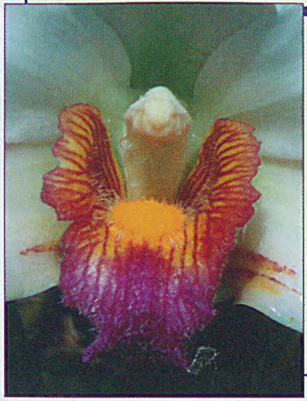


Cover Shot

Bifrenaria harrisoniae* forma *grandiflora is a fine form of this variable species from Brazil. Read about *Bifrenaria* species in this issue.

Plant & Photo: David Banks (Hills District Orchids)

Some Interesting *Bifrenaria* Species

Text and photos by David Banks

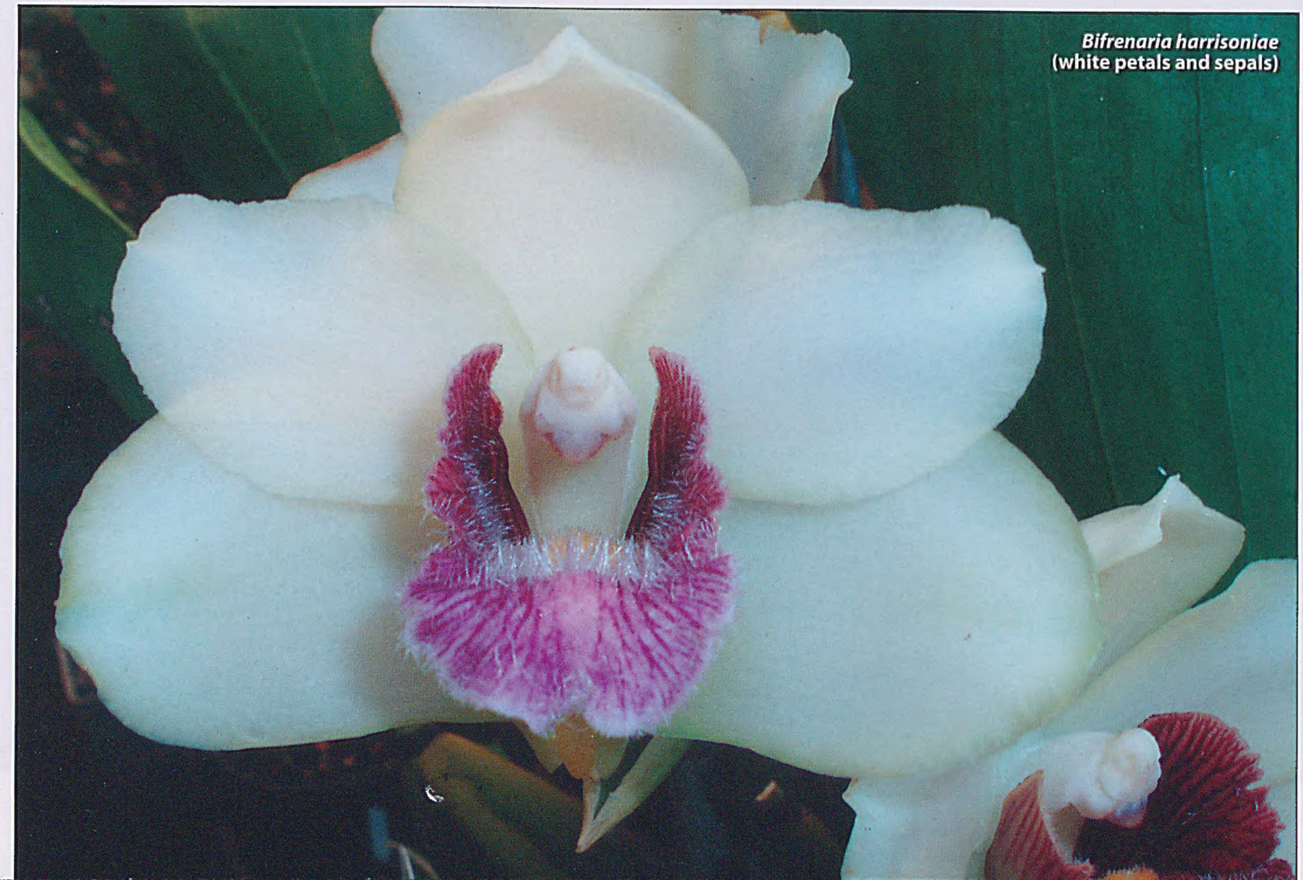
Many "non-orchid growing" gardeners grow *Bifrenaria harrisoniae*, generally tending to a plant grown in a large terracotta pot on a patio or under a tree, without knowing its name, and at times not sure it's an orchid! It is one of the easiest orchids to grow, but some find it difficult to bloom, as lush shade-grown plants rarely flower.

The South American genus *Bifrenaria* has about 20 species with the centre of distribution in Brazil. It is closely related to *Lycaste* and *Maxillaria*, and artificial hybrids have been created within those genera. Some taxonomists still include the quite distinct multifloral and smaller bloomed *Stenocoryne* within *Bifrenaria*, however I consider them different enough to be treated in their own genus.

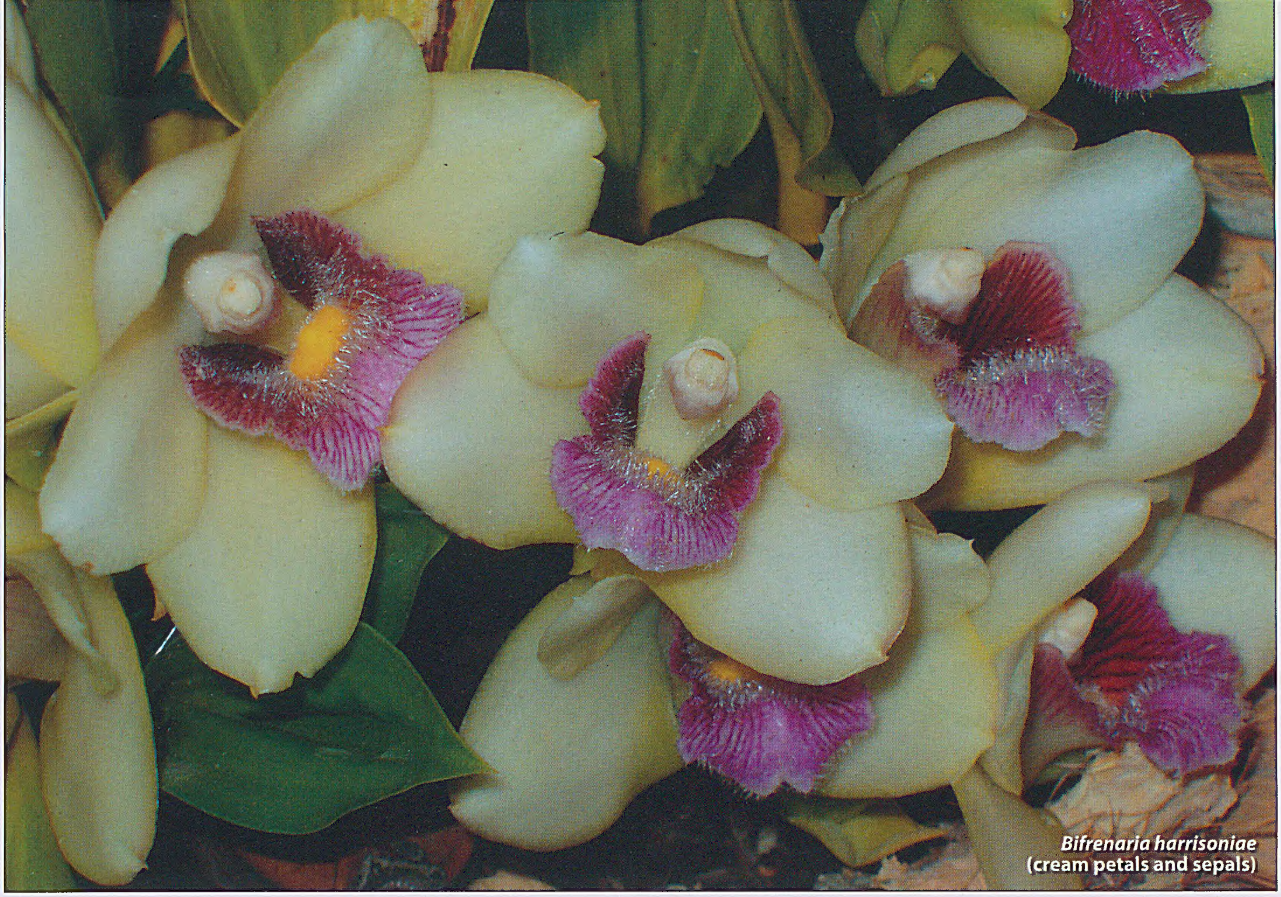
Most Bifrenarias have robust pseudobulbs with a single leathery leaf. Some plant forms can look remarkably similar, and generally plants need to be in bloom for a confident identification. They are adaptable to a wide range of temperatures and quickly grow into specimen plants if conditions are suitable. They are best grown in pots, in a pinebark based medium that is well drained. They will take quite bright light and in fact may not bloom if grown shaded. In fact, I hang up most of my plants so they can utilise that extra light and air movement. They enjoy copious watering and fertiliser during spring and summer whilst the plants are in active growth. Watering needs to be reduced throughout the winter months and plants may be moved to higher light levels. Most species have large showy colourful flowers that are highly fragrant. They bloom in spring and summer.

The following showcases some of the main species seen in cultivation with some of their colour forms.

Bifrenaria harrisoniae from Brazil is a variable late spring flowering species that is very popular in cultivation. Many refer to it as a Beginners Orchid that is impossible to kill! It has white to cream to yellowish-cream blooms, supplemented with a purple lip that is covered in fine silky hairs, that can be up to 90mm across. There have been a number of named "varieties" recognised in cultivation; however most of these are probably best treated as colour forms.

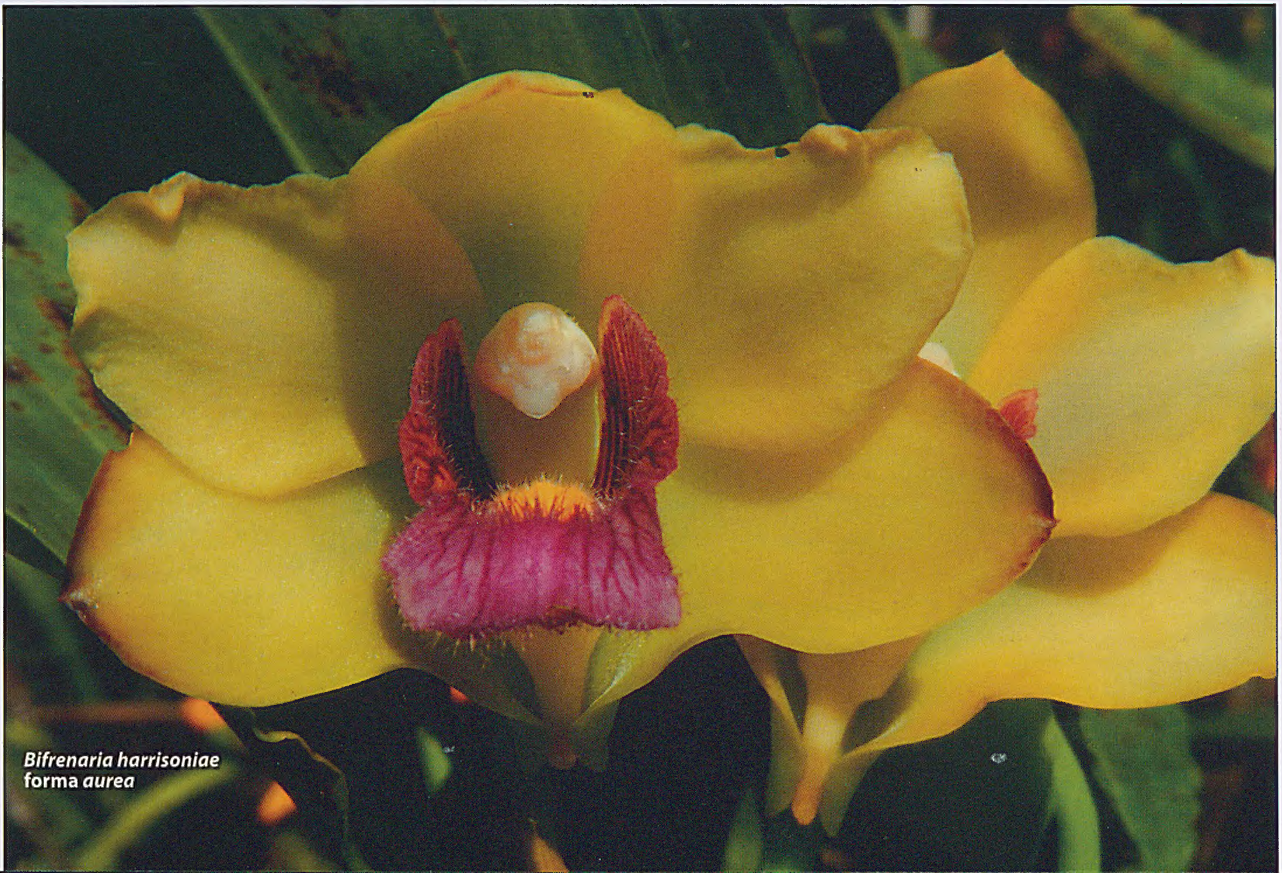


Bifrenaria harrisoniae
(white petals and sepals)



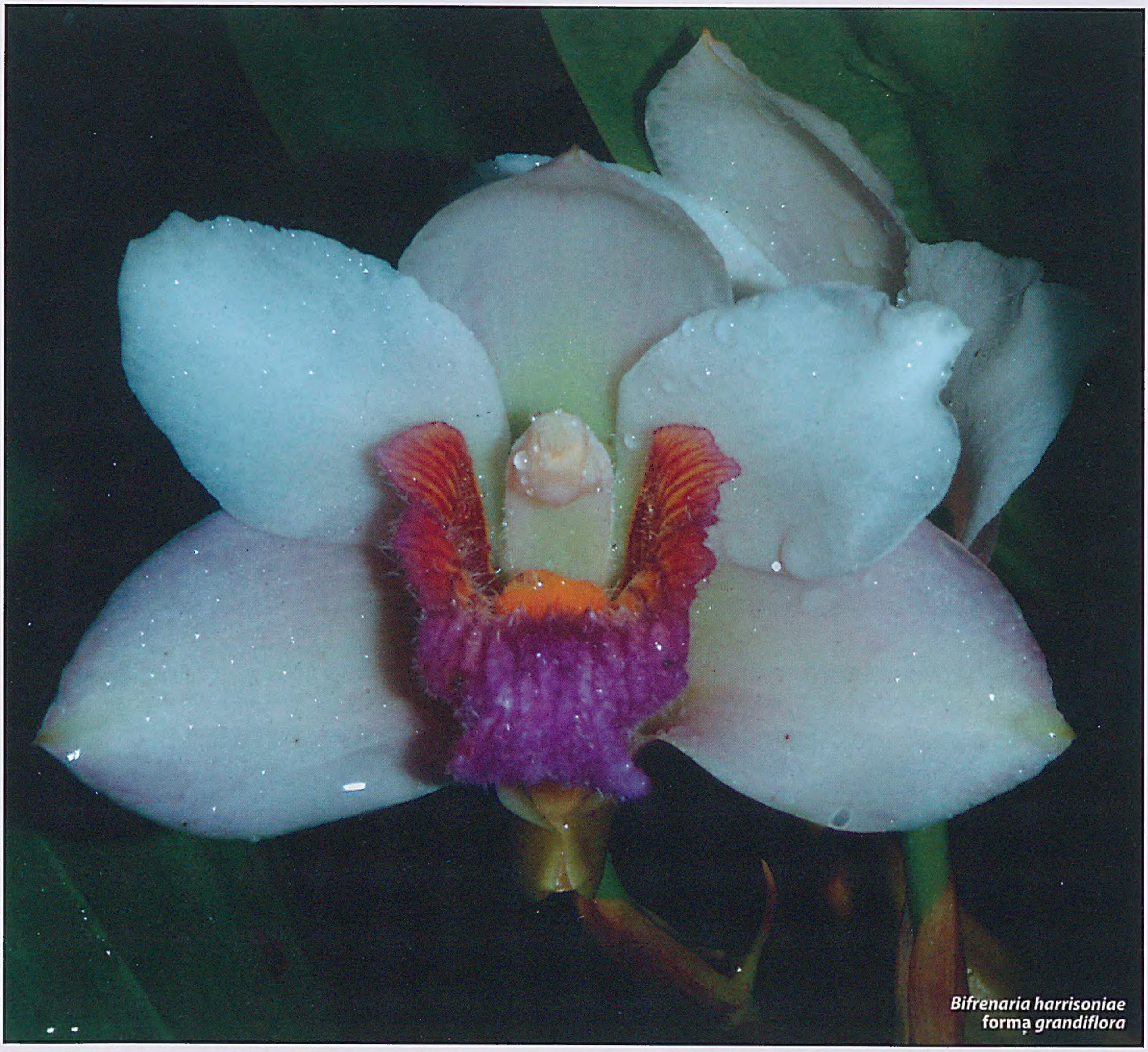
Bifrenaria harrisoniae (cream petals and sepals)

Bifrenaria harrisoniae* forma *aurea has a distinct creamy-yellow background to the flower. This impure colour form is not that popular as the floral tints make it look like the blooms are going off, even if they have just opened.



Bifrenaria harrisoniae forma *aurea*

Bifrenaria harrisoniae* forma *grandiflora is a very impressive horticultural form with flowers larger than the typical species, possessing large sidelobes on the labellum that is largely golden in colour, with purple veining. Up to three flowers are produced (but usually one or two) on taller stems than the Type form.



Bifrenaria harrisoniae forma *grandiflora*

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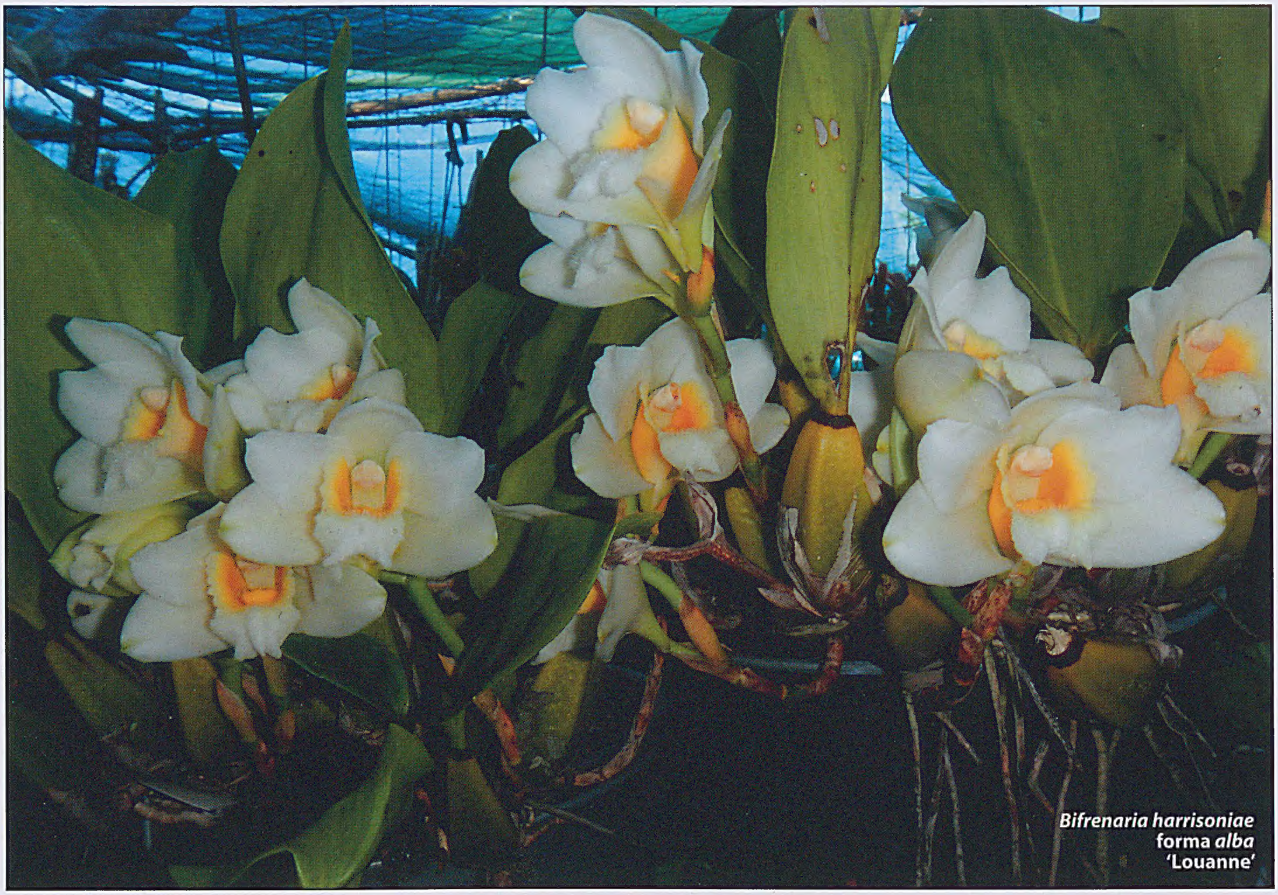
Bifrenaria harrisoniae
forma *grandiflora*
(showing labellum detail)

Bifrenaria harrisoniae* forma *alba is the albino form of the species, with pure white blooms and yellow at the base of the labellum. I remember when York Meredith first brought these plants into the country in the 1980s, and I was able to select from about two dozen flowering plants. I picked the best shaped form from the batch that was also quite floriferous. I since gave that plant the cultivar name of 'Louanne' and it remains the best white form of the species I have seen. Many species orchid enthusiasts now have this plant in their collections. It is also much easier to flower than the typical variety.


***Bifrenaria harrisoniae* forma *alba* 'Louanne'**

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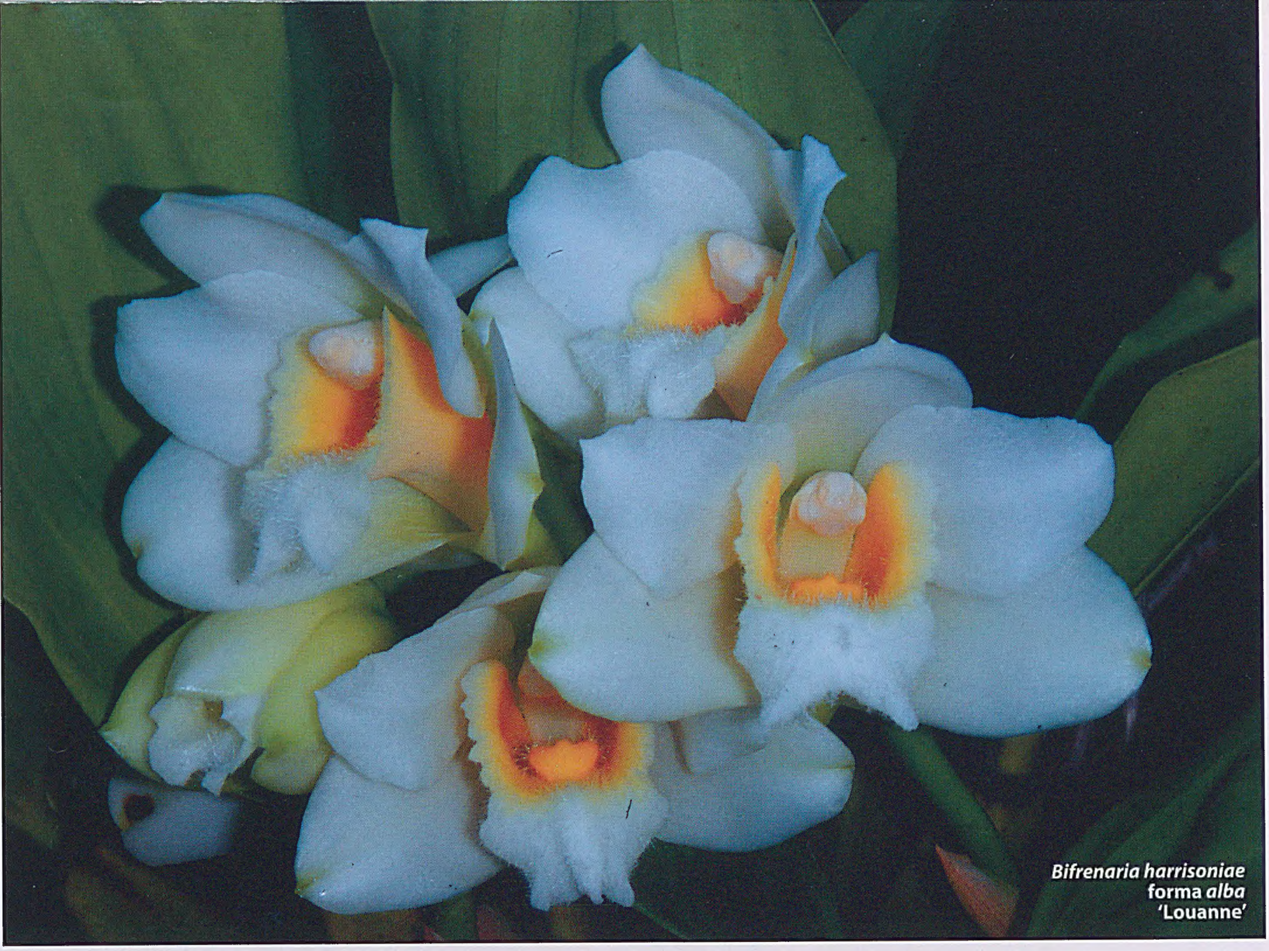
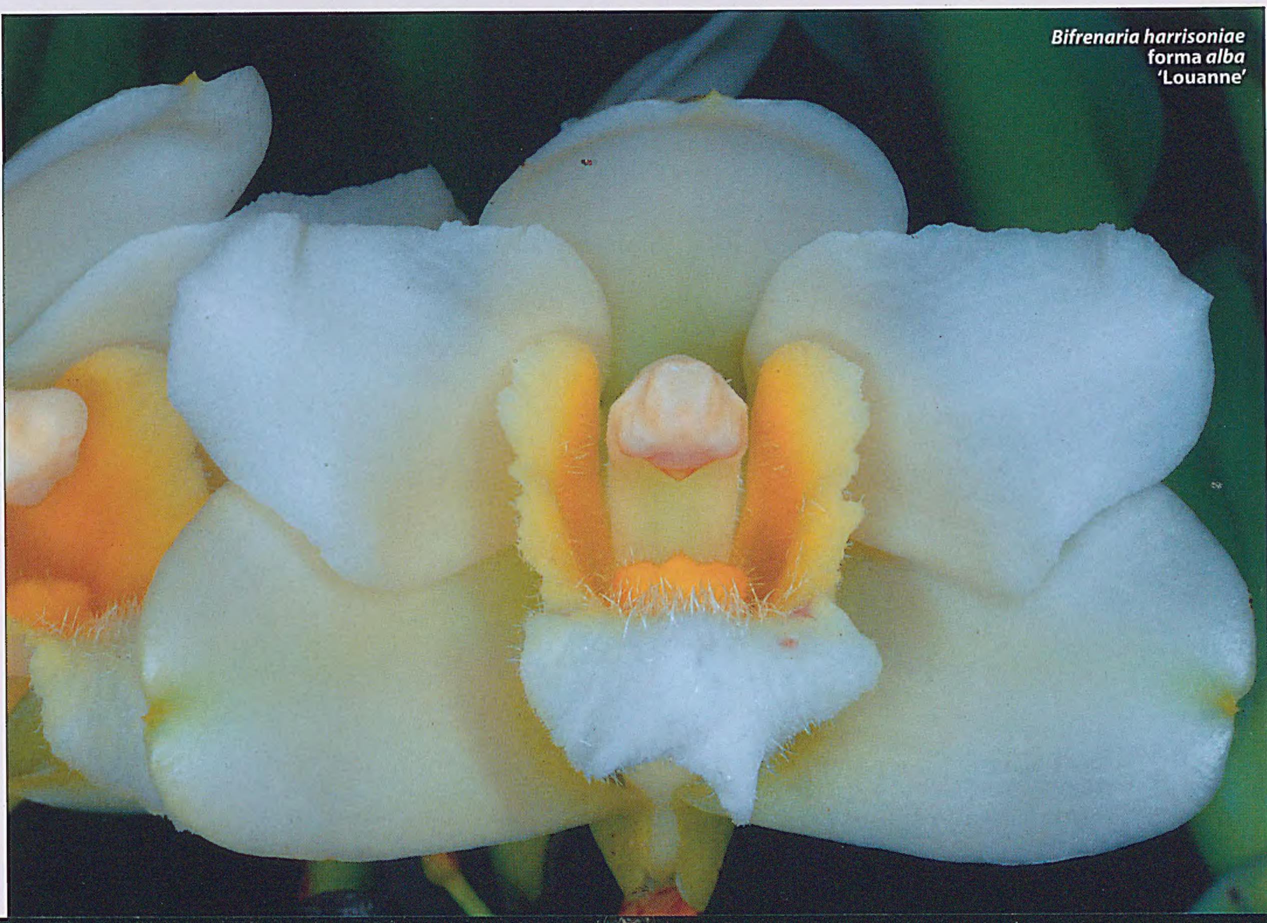
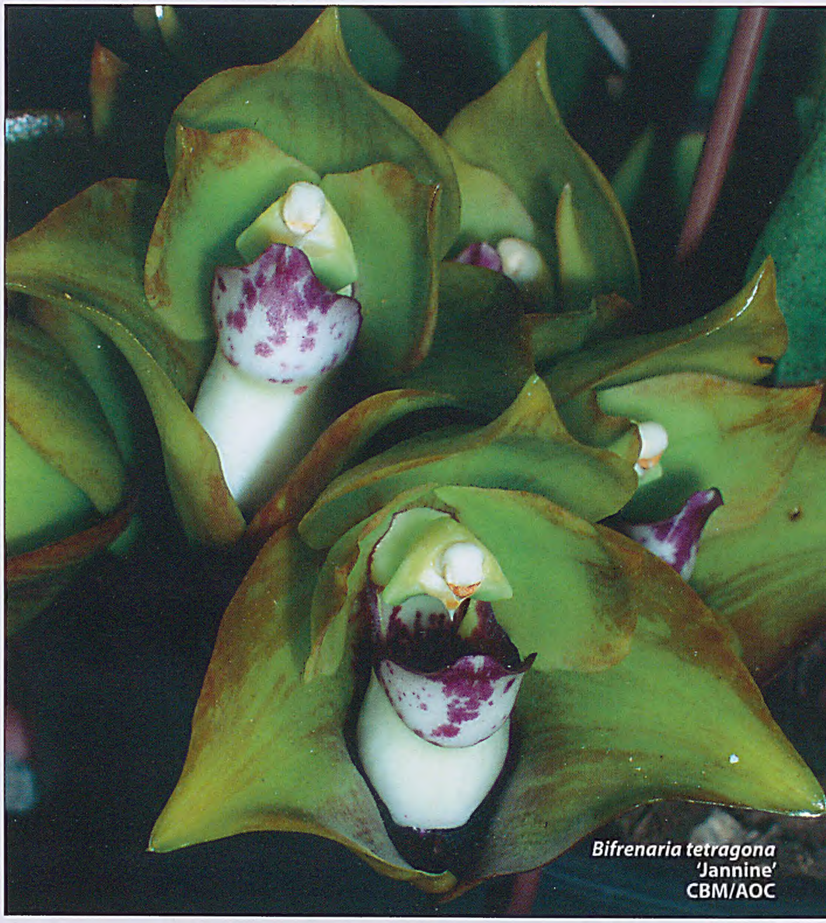


Bifrenaria harrisoniae
forma *alba*
'Louanne'

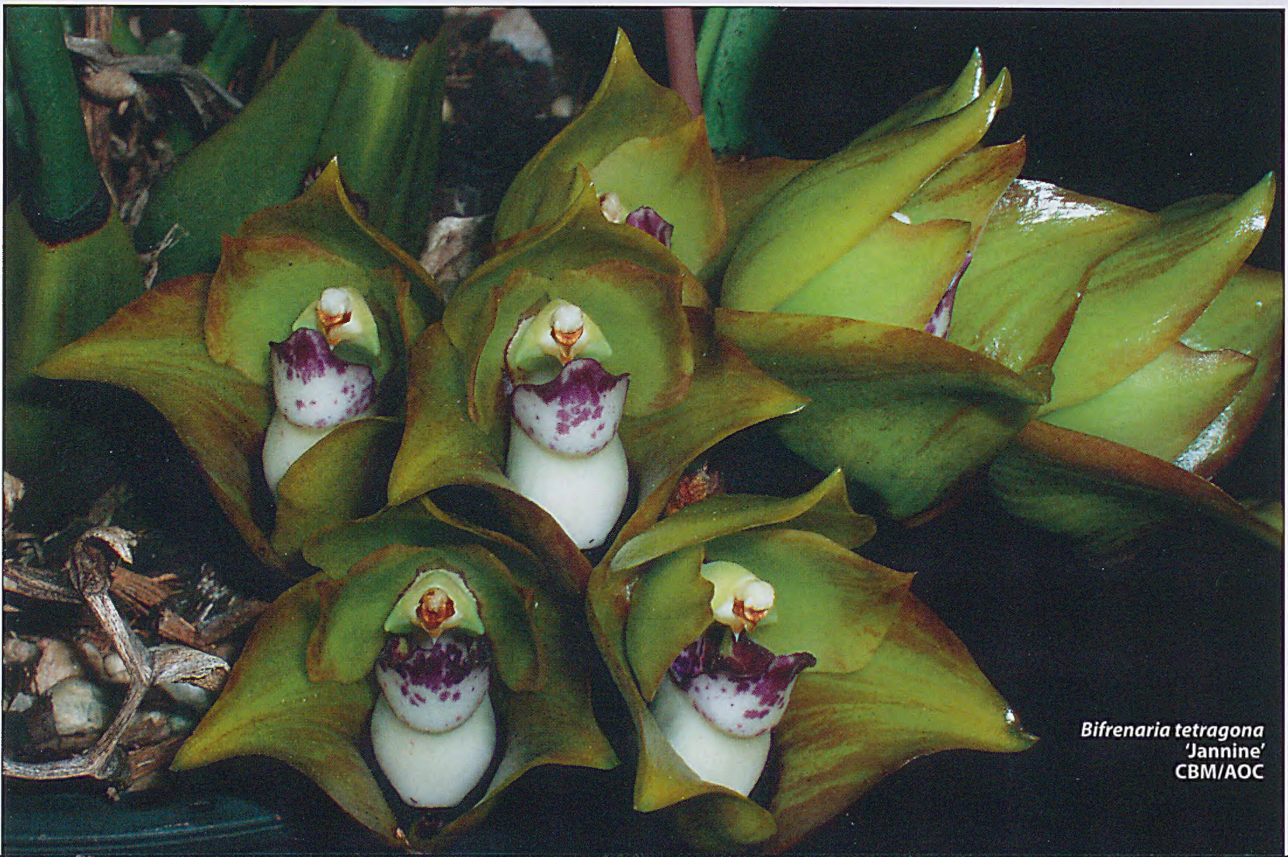
Bifrenaria harrisoniae
forma *alba*
'Louanne'



Bifrenaria tetragona was for many years quite a rare plant in Australia. In the early days of the Orchid SPECIES (NSW) society, only the late Wal Upton and late Sandy Holmes were known to have different specimens. At the time, Wal (with wife Jill) traded as "Double U Orchids", an outcross was made between the two genetically different plants, and seedlings were subsequently made available. I know many were sold and quite a few used as raffle plants at the meetings. The best one that flowered I named 'Jannine' CBM/AOC-NSW and it was subsequently awarded a Certificate of Botanical Merit from the Orchid Society of New South Wales and the Australian Orchid Council back on 22 February 1993. (Award details: Segments yellow 1B, with red-purple at base, suffused into striations at segment ends. Labellum purple 79A at top, white 155D lower. 2 racemes 8 & 6 fully opened.) It has short inflorescences, producing up to eight crowded blooms (3-5 is normal) that do not open fully and are somewhat cuppy and facing up. They are predominantly green, and are streaked or flecked with maroon; the labellum is deep purple. The flowers have a strong and somewhat distinctive yet unpleasant, spicy fragrance.

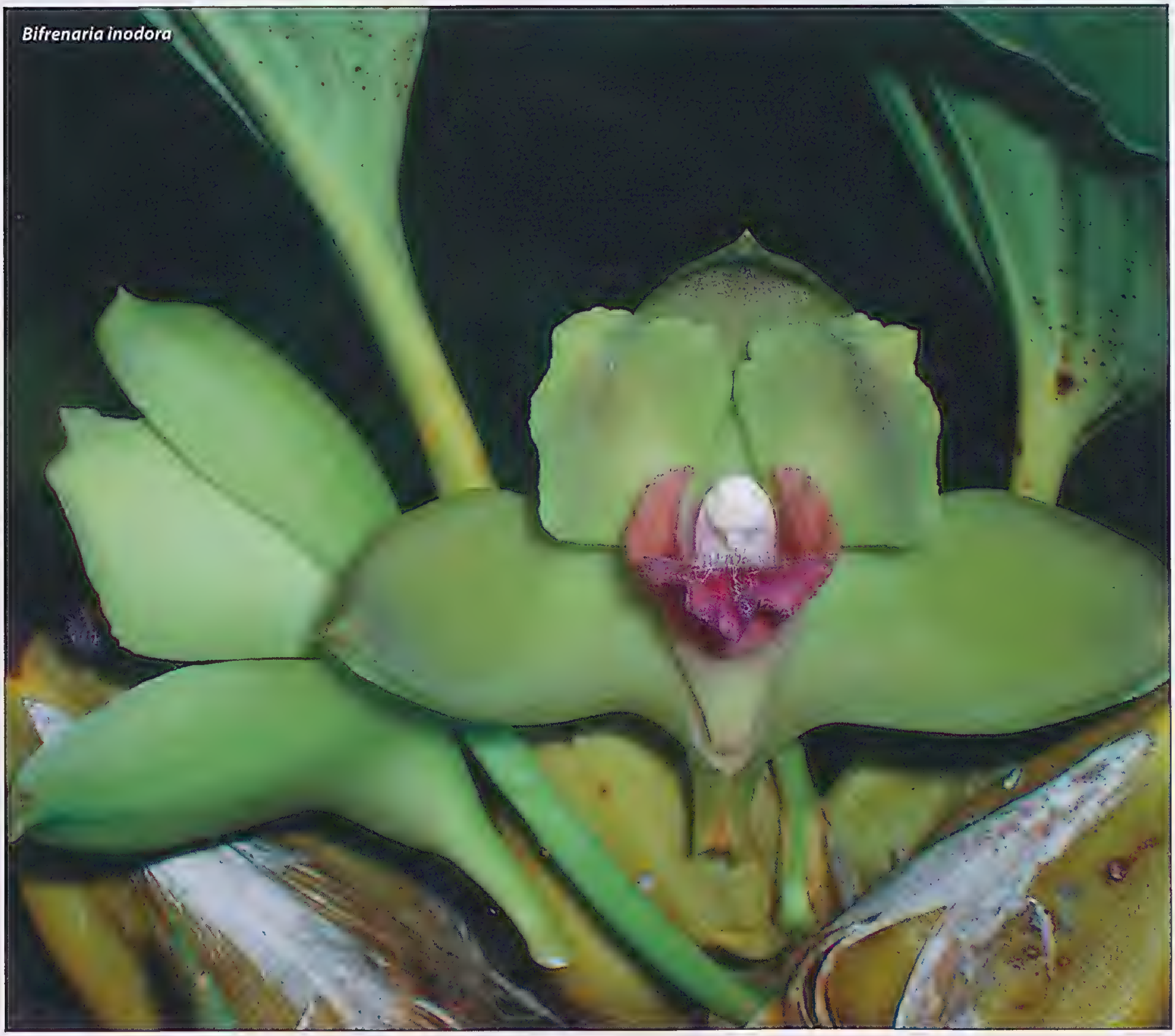


Bifrenaria tetragona
'Jannine'
CBM/AOC



Bifrenaria tetragona
'Jannine'
CBM/AOC

Bifrenaria inodora has lime green, unscented blooms with a contrasting predominantly purple labellum. It is summer flowering. Interestingly, many of these related *Bifrenaria* have greenish yellow pseudobulbs with a very dark collar of dark maroon-brownish-black at the top of the bulb, quite distinctive once the leaf has dropped off.


Bifrenaria inodora

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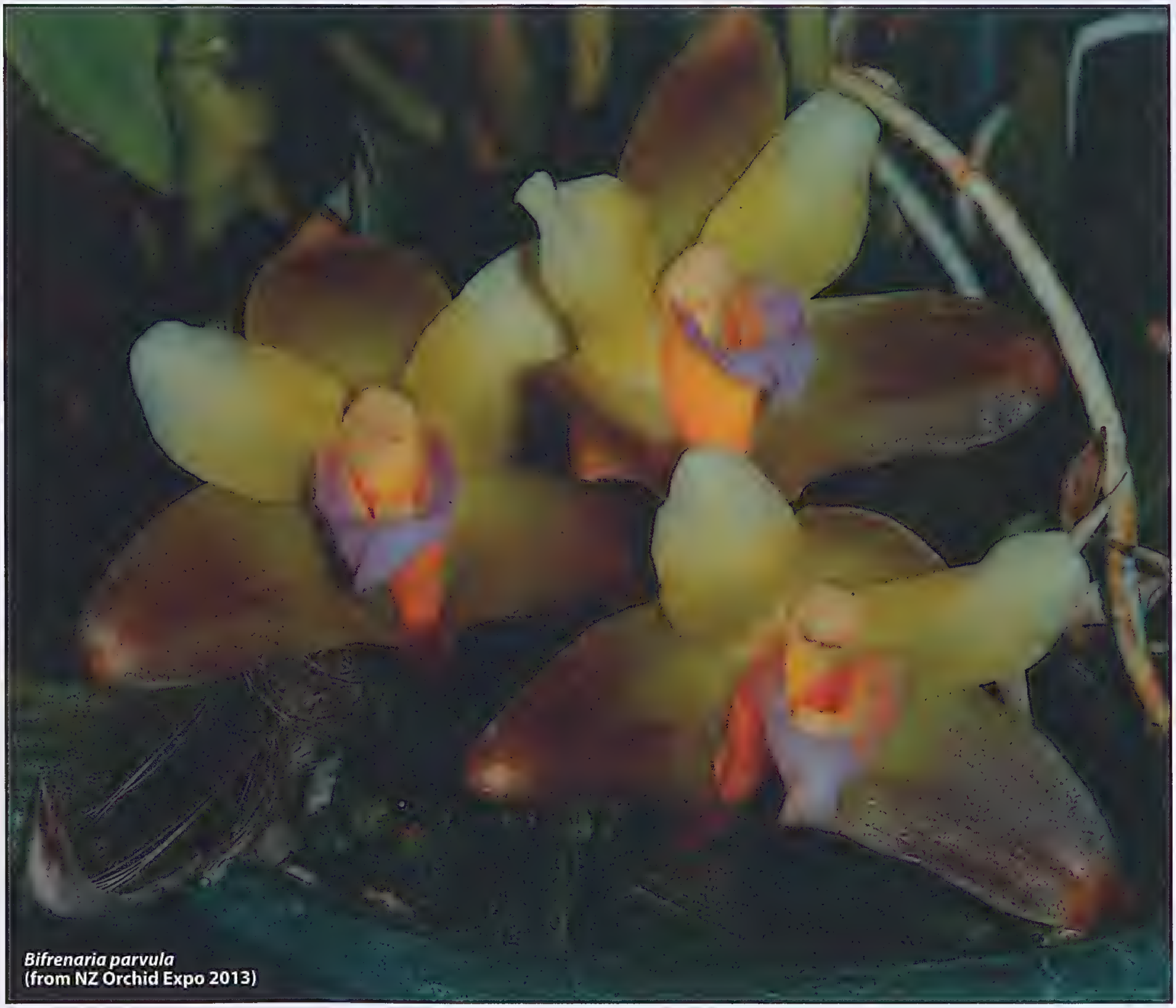
Bifrenaria parvula is a poorly known species from Rio de Janiero State in Brazil. It is closely related to *Bifrenaria inodora*. I have not seen this species in Australia, with the photographed example (that was un-named) exhibited at the New Zealand Orchid Expo, held in New Plymouth in November 2013. It appears to be a rare species with a very restricted distribution and efforts should be made to propagate it from seed.



Bifrenaria parvula
(from NZ Orchid Expo 2013)

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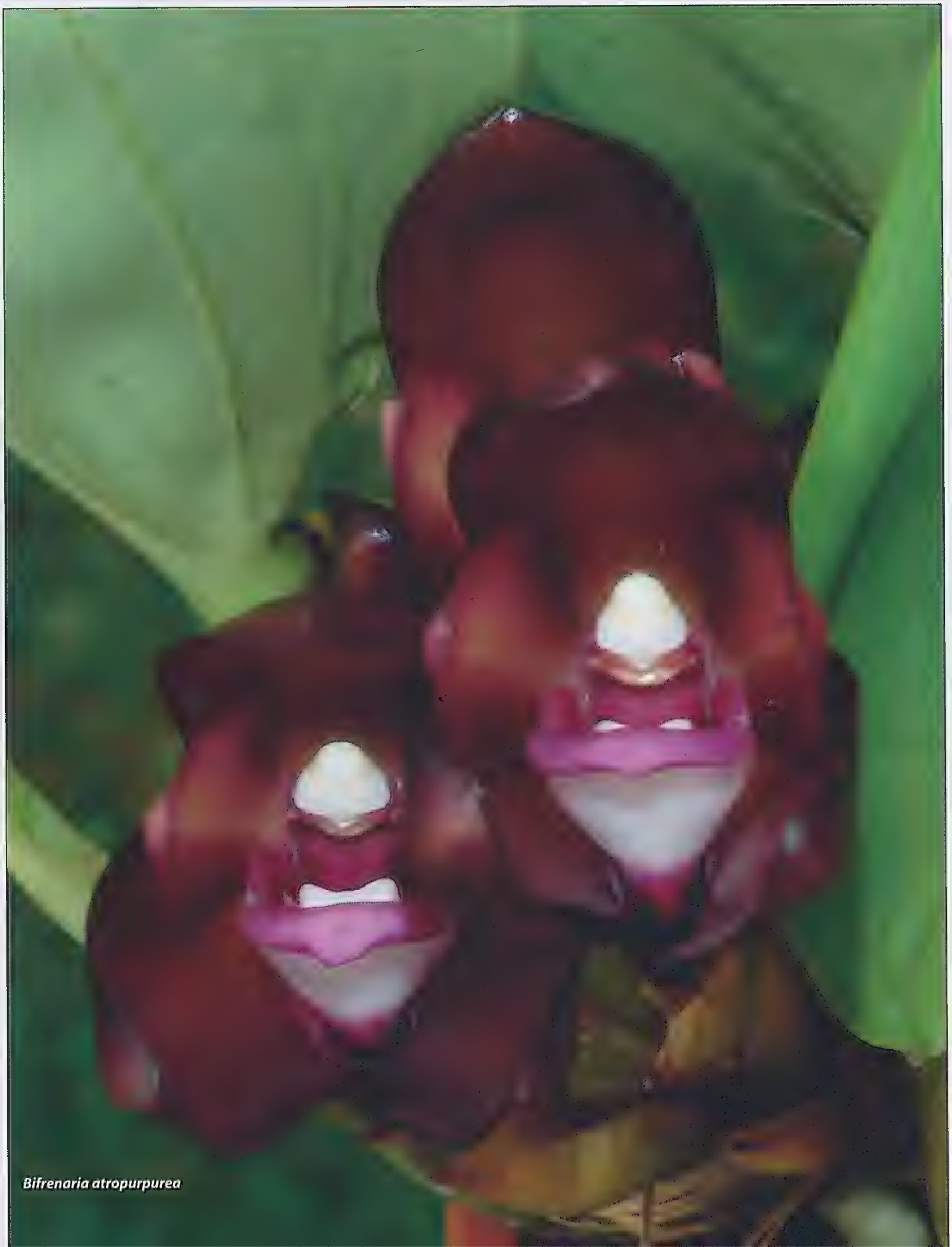
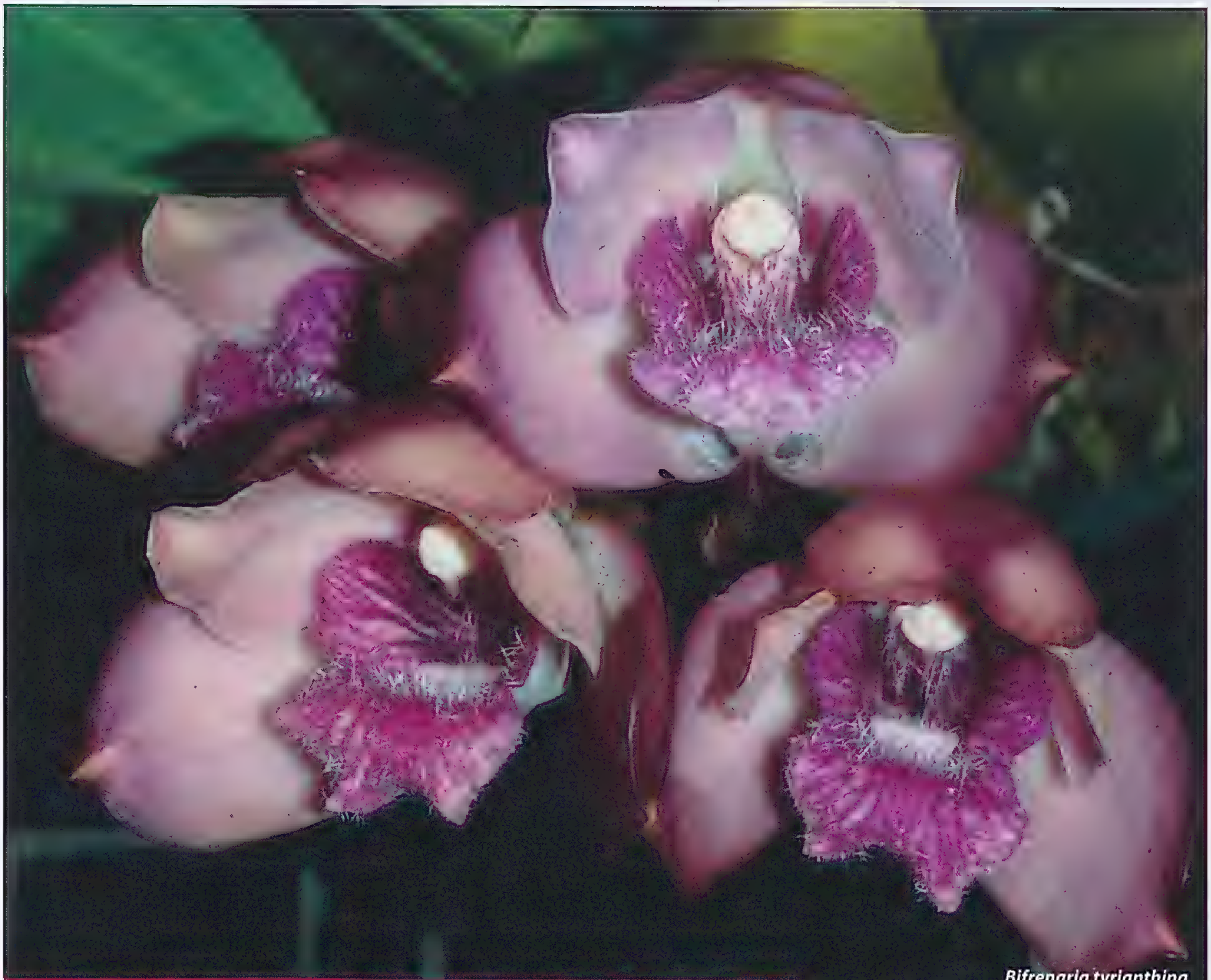
Bifrenaria atropurpurea has up to four very dark purple-maroon blooms in summer. These fleshy flowers do not open widely and have a natural spread of about 45mm. It remains a scarce plant in cultivation, with many plants such named in collections blooming to be *Bifrenaria tyrianthina*.

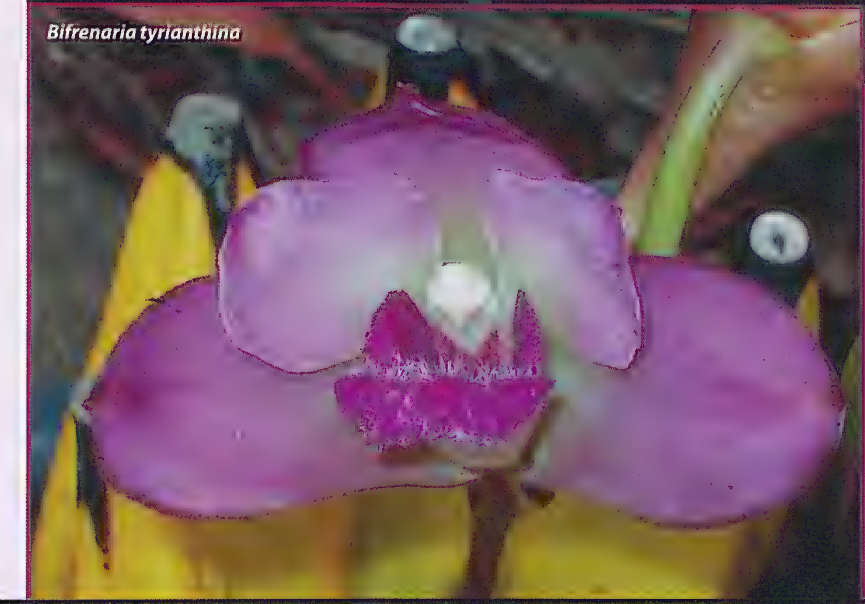


Bifrenaria atropurpurea

Bifrenaria tyrianthina is another quite variable species that is very similar to *Bifrenaria harrisoniae*, with many mistaking it for a pink to purple colour form of that later species. Maybe they are right? *Bifrenaria tyrianthina* generally has a longer flower spike and light pink to mauve-purple blooms. The shape and colour can vary substantially between different plants and the labellum also can be variable in size, length and shape. Some cultivars produce single blooms, whereas others can have four fully open flowers on the inflorescence.



***Bifrenaria tyrianthina* 'Phil Hicks'**
(plant: Tinonee Orchid Nursery)



Bifrenaria tyrianthina

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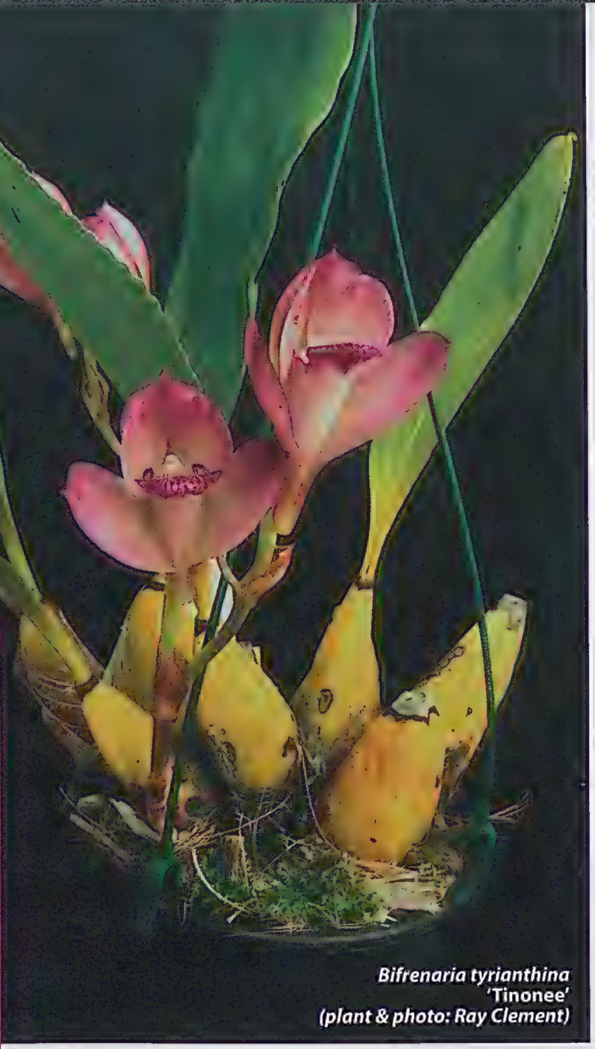
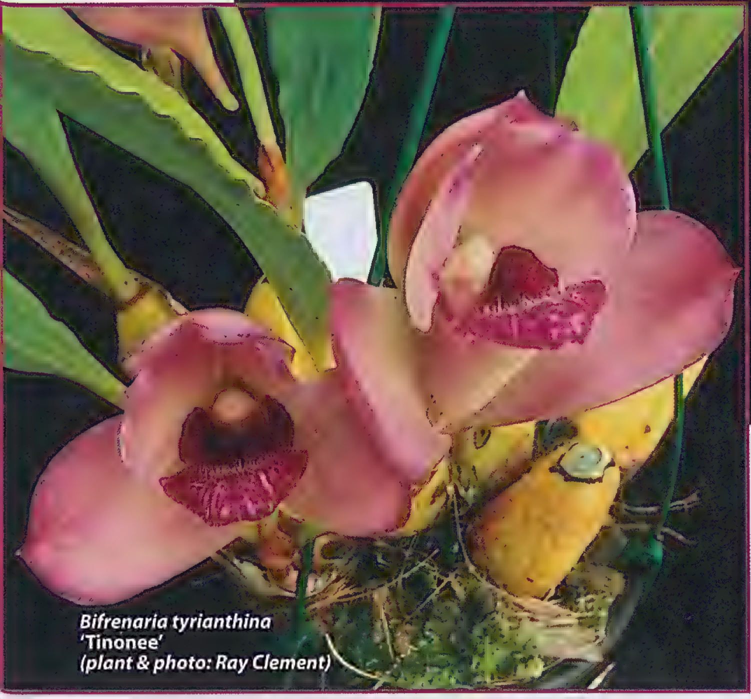
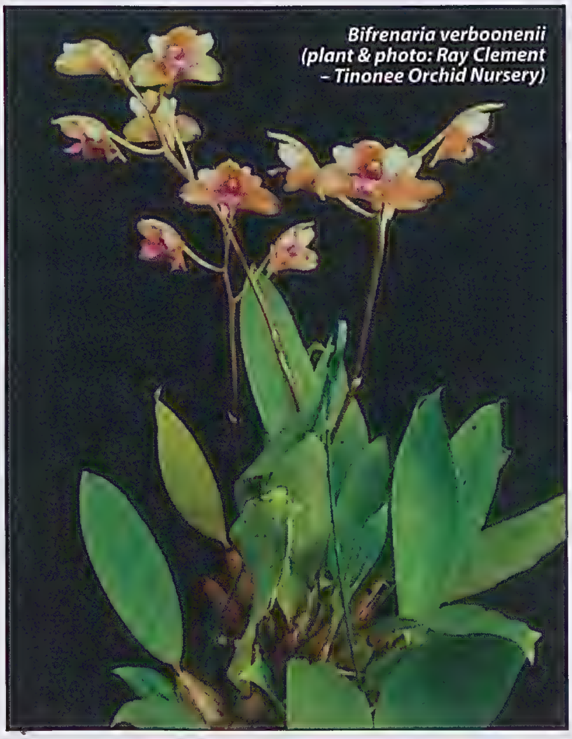


Bifrenaria tyrianthina
'Tinonee'
(plant & photo: Ray Clement)



Bifrenaria tyrianthina
'Tinonee'
(plant & photo: Ray Clement)



Bifrenaria verboonenii
(plant & photo: Ray Clement
– Tinonee Orchid Nursery)

Bifrenaria verboonenii is a very rare and seldom seen species that was only formally named and described as recent as 2000. Interestingly at least one plant was in cultivation in Australia for over three decades, imported from Brazil is *Bifrenaria tyrianthina,* yet it is clearly very different to that species. Apart from the unique colour combination of the flowers, the tall up to five-flowered upright inflorescence is a significant diagnostic feature; within a genus where the flowers are generally produced around the base of the plant. Plants have been distributed amongst a number of orchid species enthusiasts to ensure this plant is not lost.

All plants grown and photographed by the author and/or Hills District Orchids unless specified. ■

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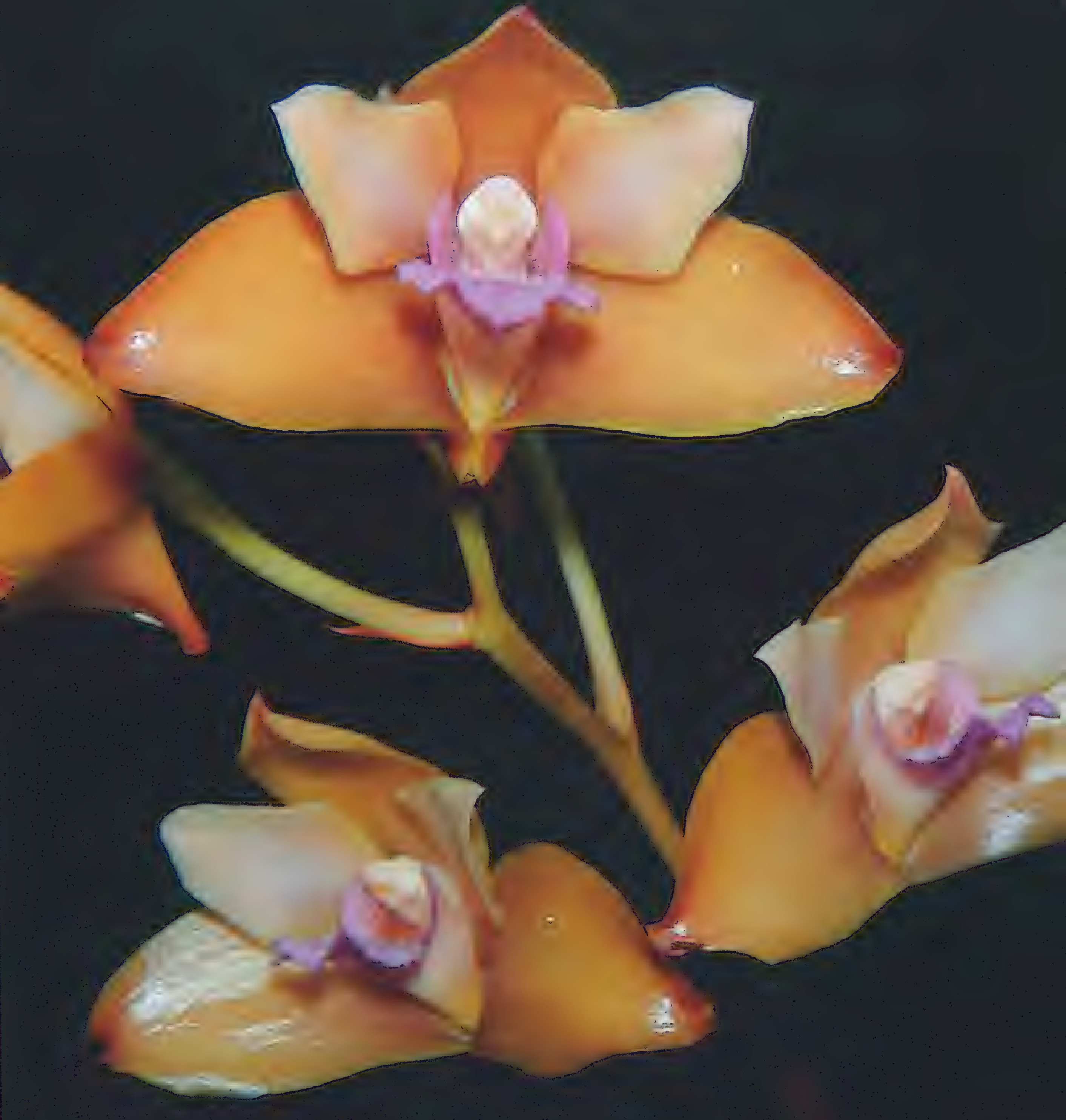
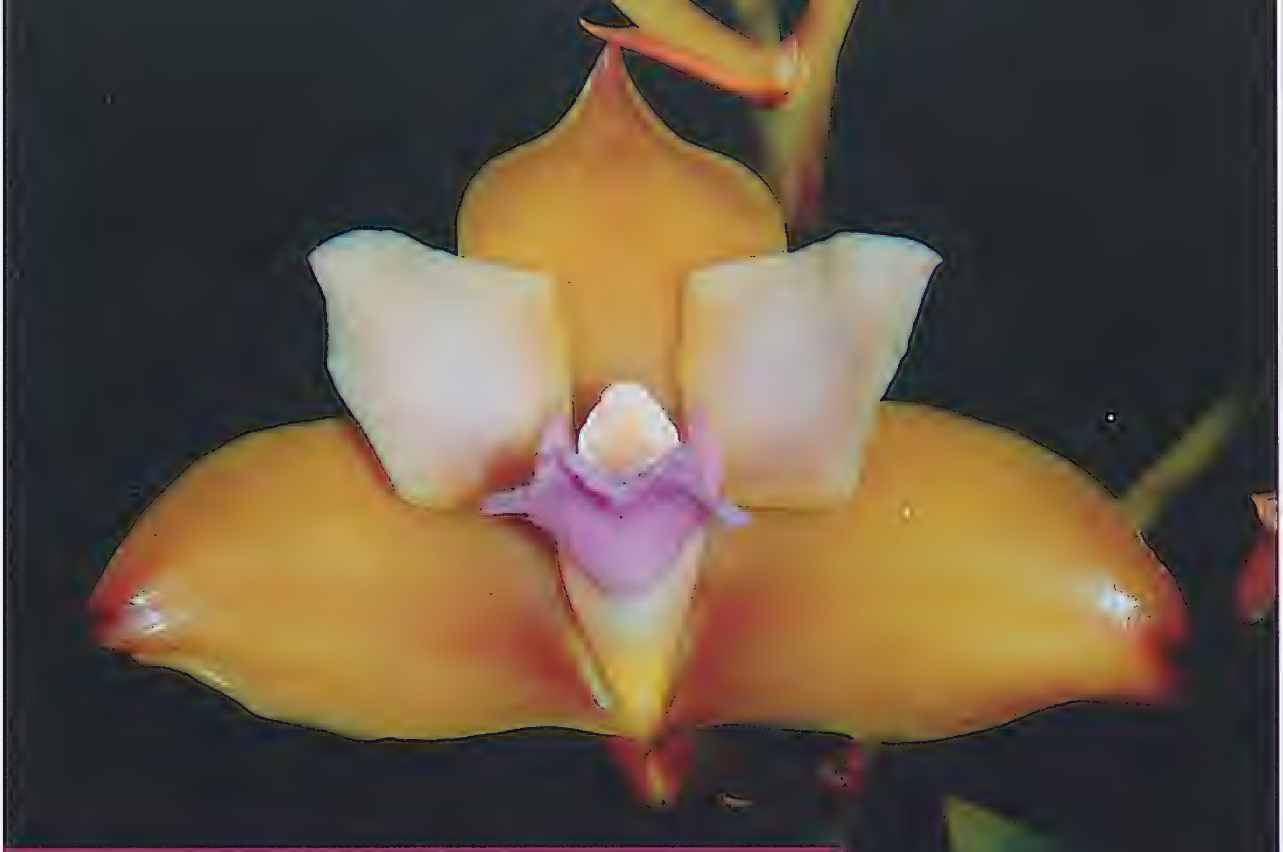
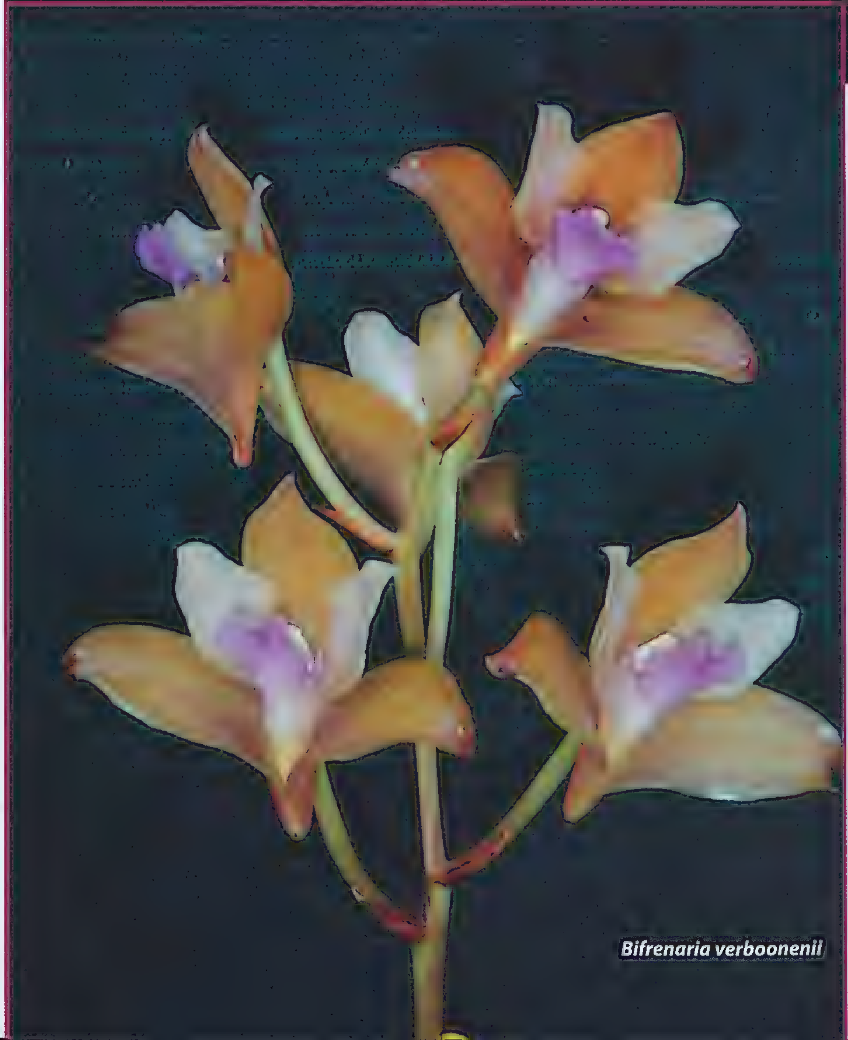


Bifrenaria verboonenii



Bifrenaria verboonenii



Bifrenaria verboonenii

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AOR 065

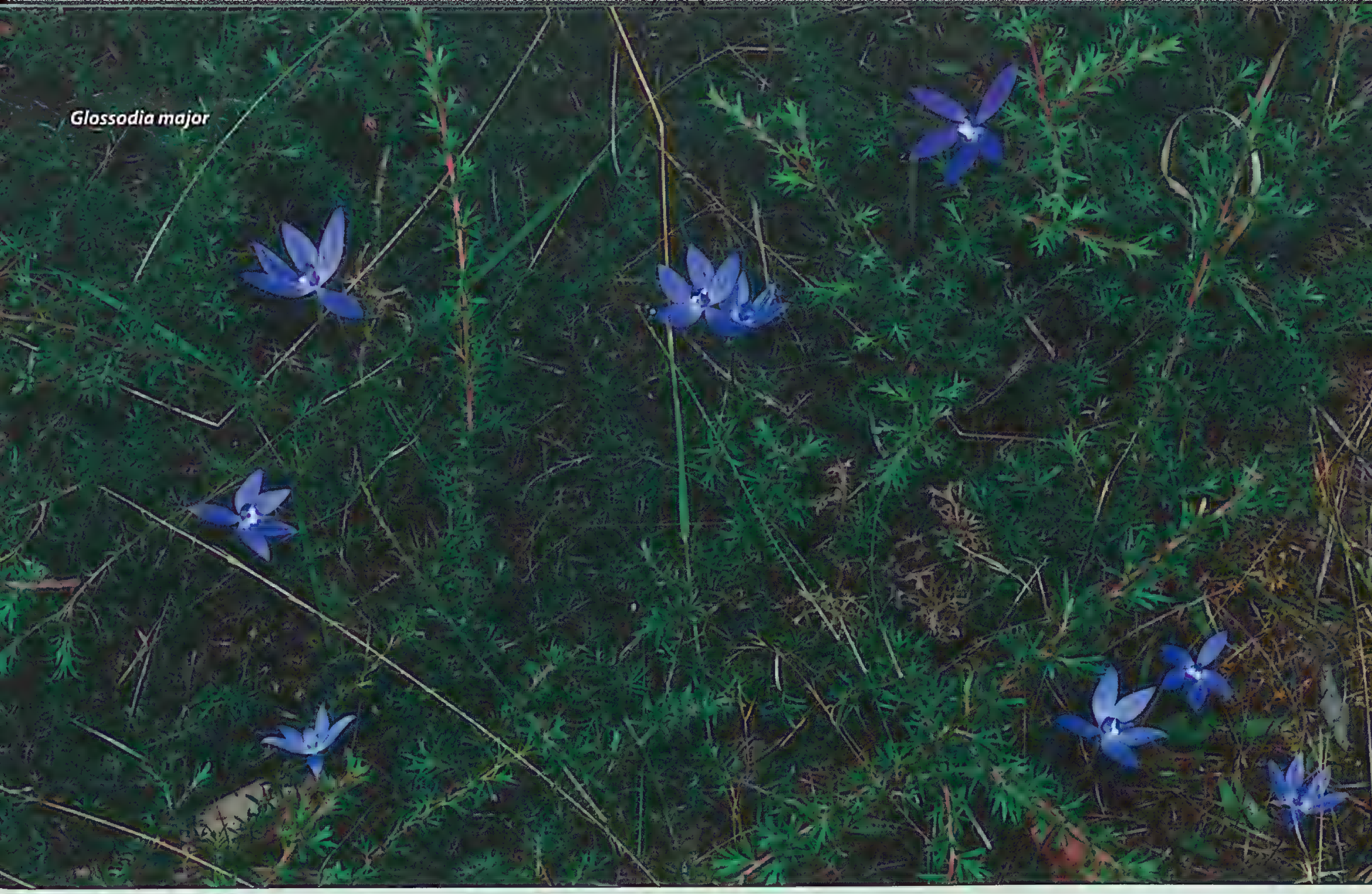
Be Thankful for the Common Species

Text and photos by Alan W. Stephenson

A year or so ago I was host to two South Australian orchid couples whom I had met at a meeting of the Native Orchid Society of South Australia the previous year. They were returning from an orchid event in Queensland and contacted me to ask if I could show them some local orchid species as they had time to spare on their way home.

This was an invitation for me to stop lounging around and do something, so in preparation I went to a few close local sites to ensure the group would have something to see and photograph. A power line easement less than 10 minutes from my home was the first stop where I know there are good numbers of *Glossodia major* and *Glossodia minor*, plus several *Caladenia* (*Petalochilus*) species. While walking over the area I encountered a population of *Speculantha* (*Pterostylis*) *vernalis* and this species just happens to be listed as Critically Endangered. I thought this may be a good start and immediately contacted my local National Parks Wildlife Service office which is five minutes further up the road. As it turned out the electricity authority was about to erect new concrete power poles. An immediate on-site meeting was arranged with the NPWS officer, yours truly and the electricity foreman with the agreement vehicles would not be driven over the 40m x 40m population.

Liparis reflexa


Glossodia major

As the most common species in the genus, *Speculantha* (*Pterostylis*) *parviflora* has limited distribution in South Australia. I was pleased I could show my visitors something endemic to the Shoalhaven region which is also critically endangered and this was the first site they saw the following day. Several other sites were also on the list and just a few kilometres further west than these power lines. One of these was a 4wd only track and the five of us were snug in my Hilux as we bounced over a rock shelf to an escarpment which presented a magnificent display of *Dendrobium speciosum* (*Thelychiton speciosus*). This was the beginning of the common orchid escapade and 2013 was a great year for this species with 400 metres of a flowering escarpment on display.

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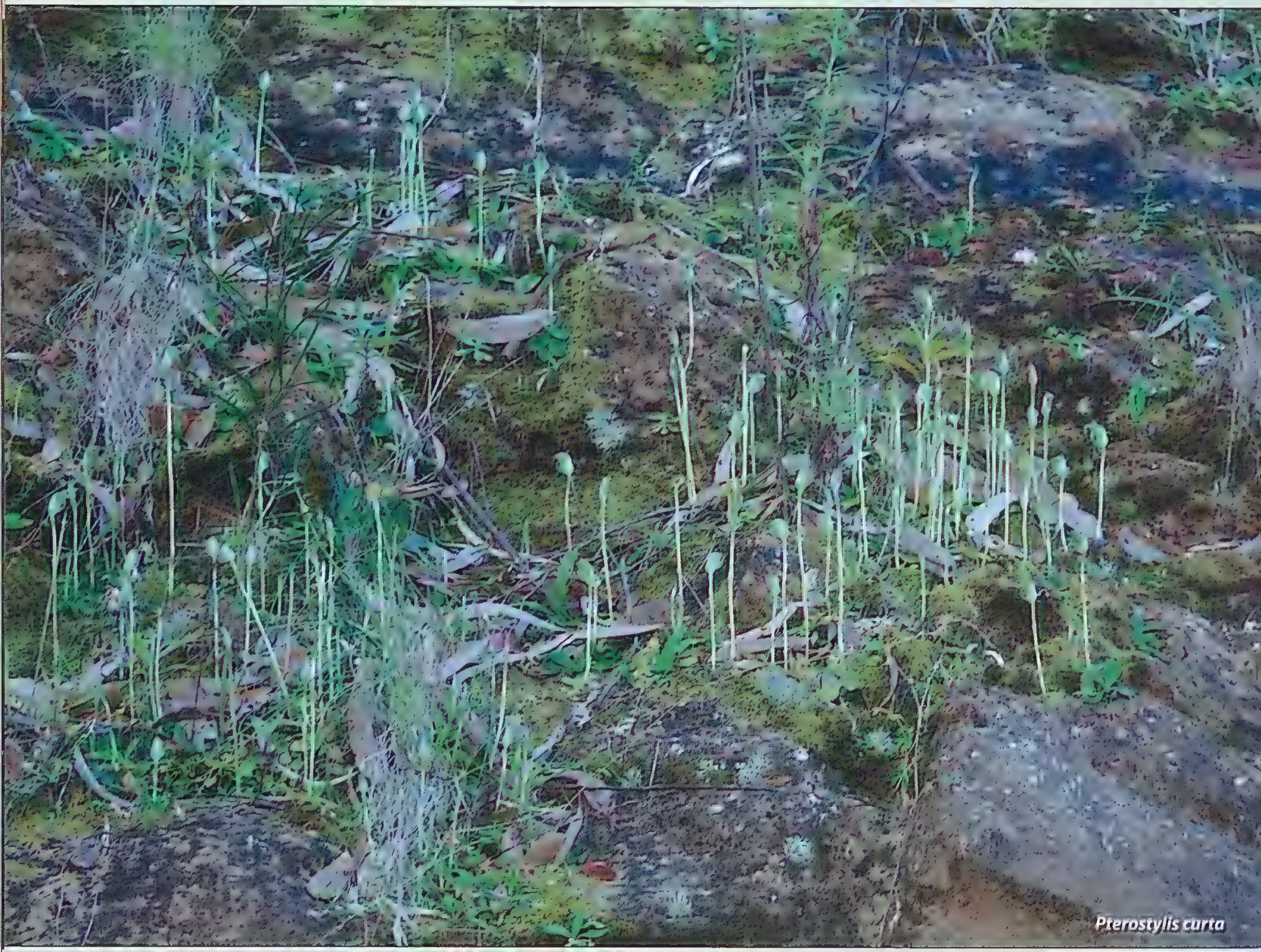
However it was the next day which surprised me as we drove up a nearby mountain where we saw *Dockrillia linguiformis* (*Dendrobium linguiforme*), *Dockrillia pugioniformis* (*Dendrobium pugioniforme*) and *Sarcochilus falcatus*, all on the same tree close to the edge of the road and further up the mountain was a first rate display of more *Sarcochilus falcatus* and a few plants of *Plectorrhiza tridentata*. Then it was down the mountain through the valley and back towards Nowra over another mountain.

On the way down I mentioned the group should look out the window at a certain section to see one particular terrestrial species which should be in flower at that point, from road level to 15 metres up the steep cutting, which is rock covered by occasional thin sections of soil. At that moment I heard stop, so we stopped and I was surprised at the interest this common terrestrial had aroused. The species was the greenhood *Pterostylis curta* which would not cause that level of interest in New South Wales and many other places. The population was quite extensive with several hundred flowering plants easily visible and the reason for the interest was that *Pterostylis curta* is uncommon in South Australia occurring only in the south of that state.

Following the great display of what to this region are common lithophytes and epiphytes I was reminded, what is common to some is either uncommon or new to others and we should not take our species for granted simply because we can see large numbers of them a few minutes from home but even for the common *Pterostylis curta*, the display was first class.

Five minutes from this site a few other species are also common but these are in a rain forest national park equally at home on rocks and trees. These are *Plectorrhiza tridentata*, *Bulbophyllum shepherdii*, *Bulbophyllum exiguum*, *Dockrillia striolata*, (*Dendrobium striolatum*), *Sarcochilus olivaceus*, the rainforest form of the Ironbark Orchid, *Tropilis eburnea* (*Dendrobium aemulum*) and the always delightful *Liparis reflexa*. After a challenging period negotiating the ups and downs of large rocks and ledges which form a narrow gorge, the journey continued for ten minutes and again I take this habitat for granted (almost) but I do realise South Australia suffers from a shortage of rainforest. In this area of rainforest national park the sight of Bulbophyllums intermingled with each other is quite common and when these species are on trees they are often accompanied by either or both *Plectorrhiza tridentata* and *Sarcochilus olivaceus*.



Pterostylis curta

Bulbophyllum shepherdii

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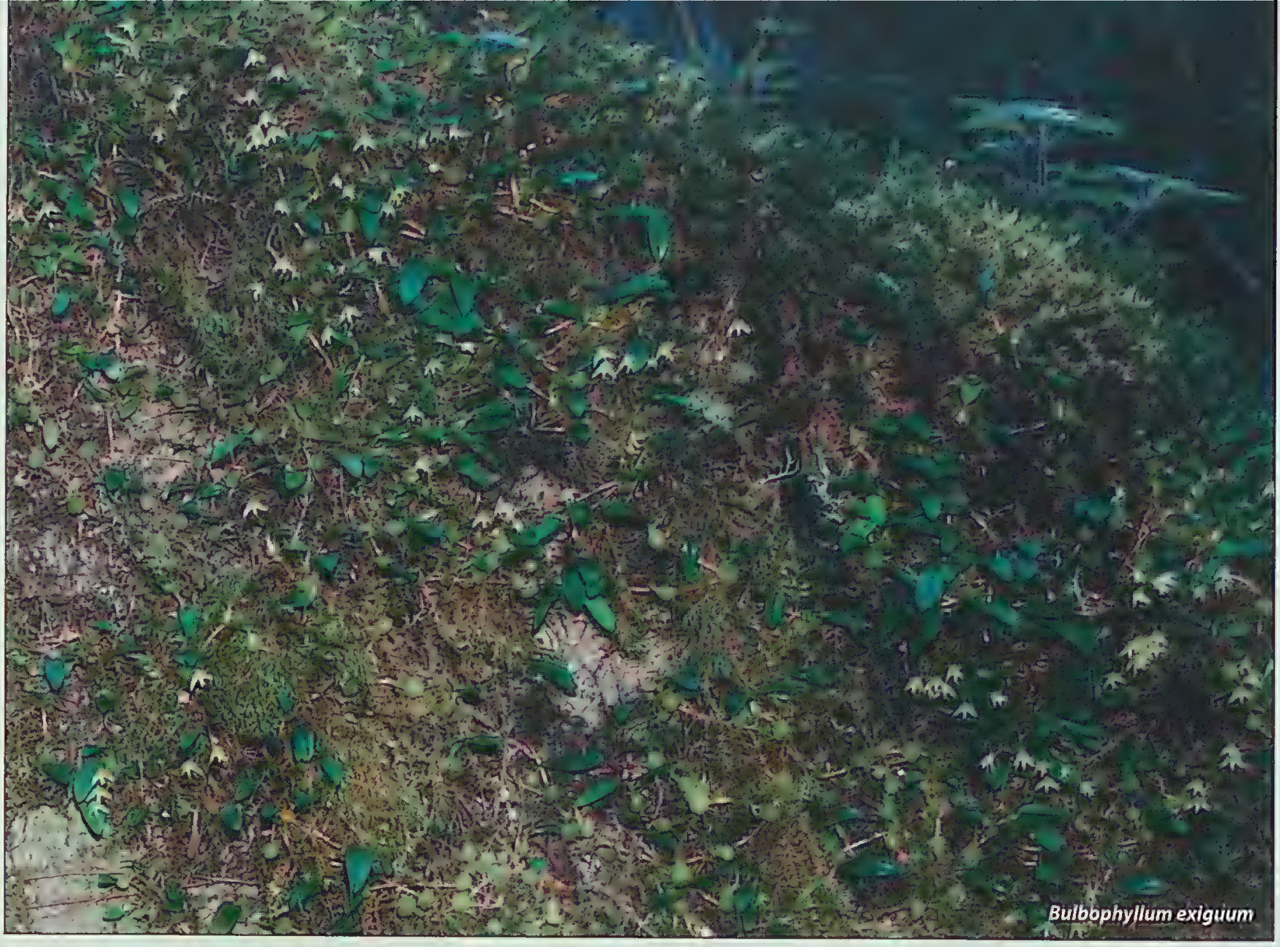
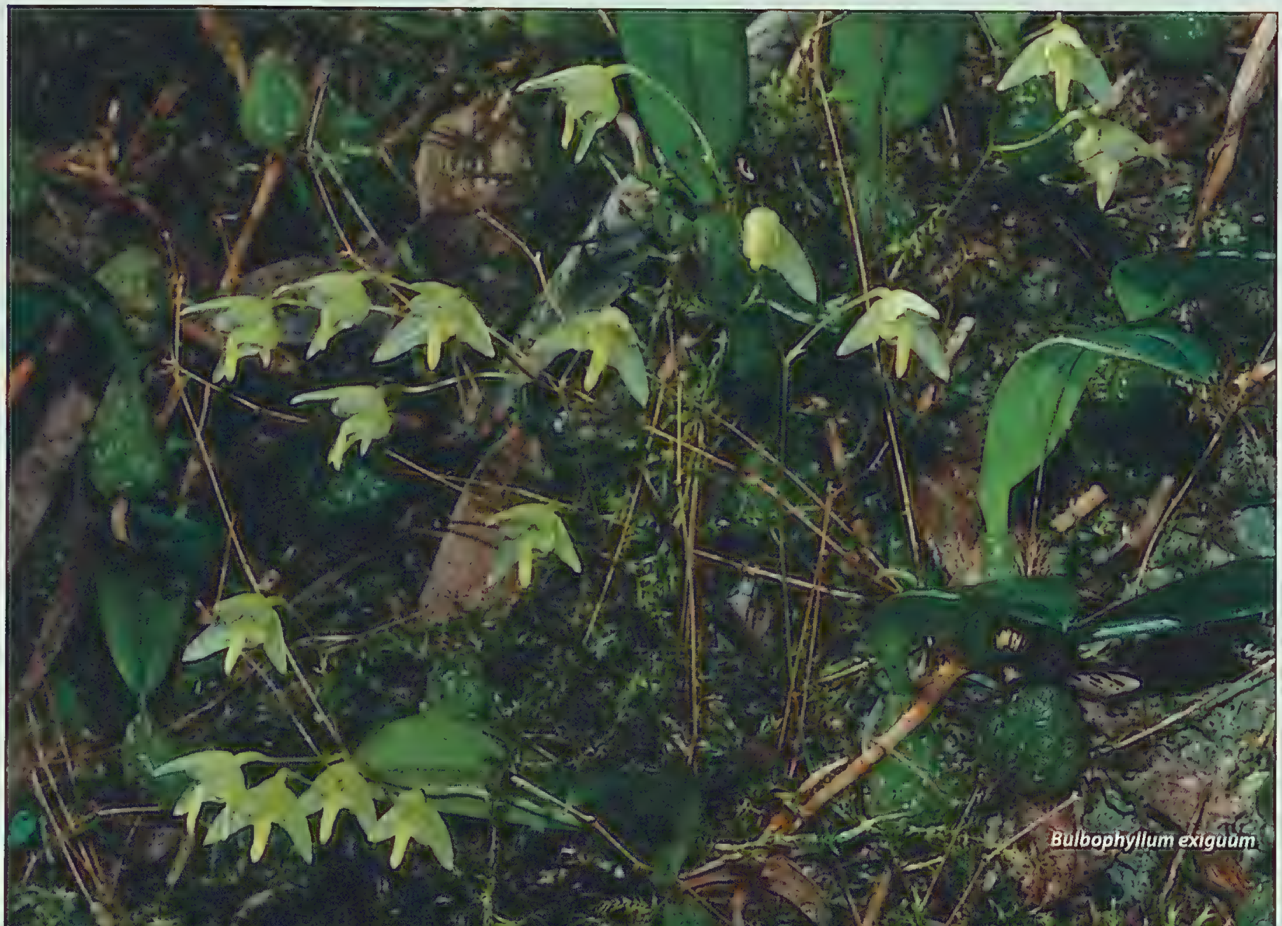


Bulbophyllum exiguum



Bulbophyllum exiguum

Dendrobium speciosum

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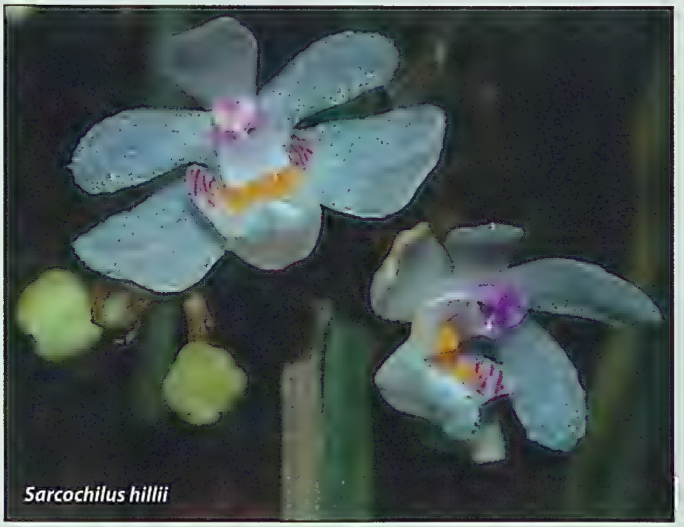
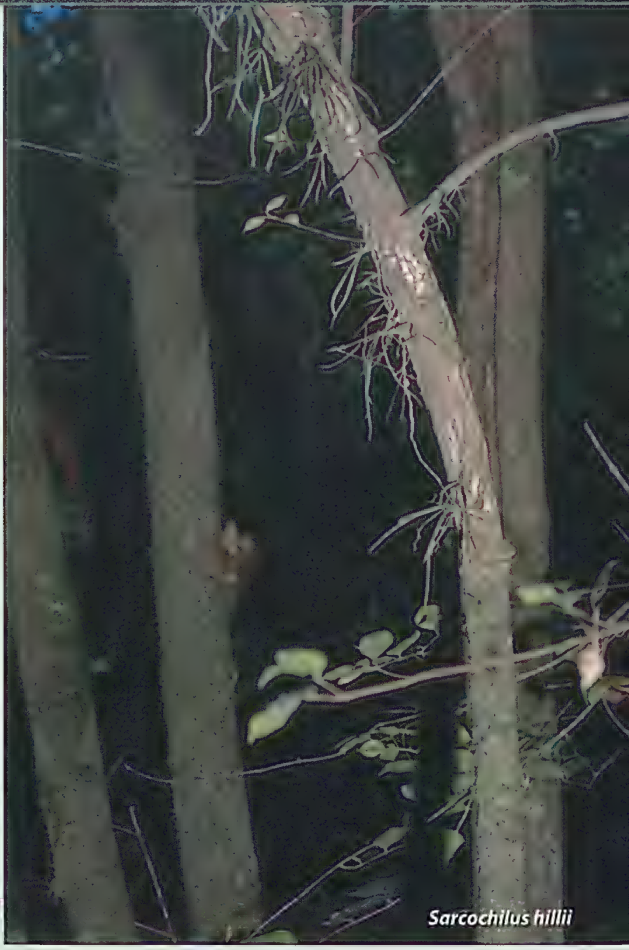
Plectorrhiza tridentata

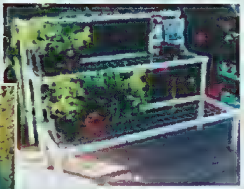
Ten minutes later at another different habitat of *Backhousia myrtifolia* (Grey Myrtle), yet another epiphytic species was in profusion. This species, *Sarcochilus hillii* is found in large numbers on its preferred host, although two have managed to become lithophytes on a small rock on the forest floor. Plants occur along the occasionally flowing unnamed creek and are not seen more than 30 metres up the slight bank from this section as it changes from *Backhousia* to wet forest, which in my area means the prominent species is *Syncarpia glomulifera* (Turpentine Tree), which again is a preferred habitat of the cobra greenhood *Pterostylis grandiflora*.



Sarcochilus hillii



Sarcochilus hillii



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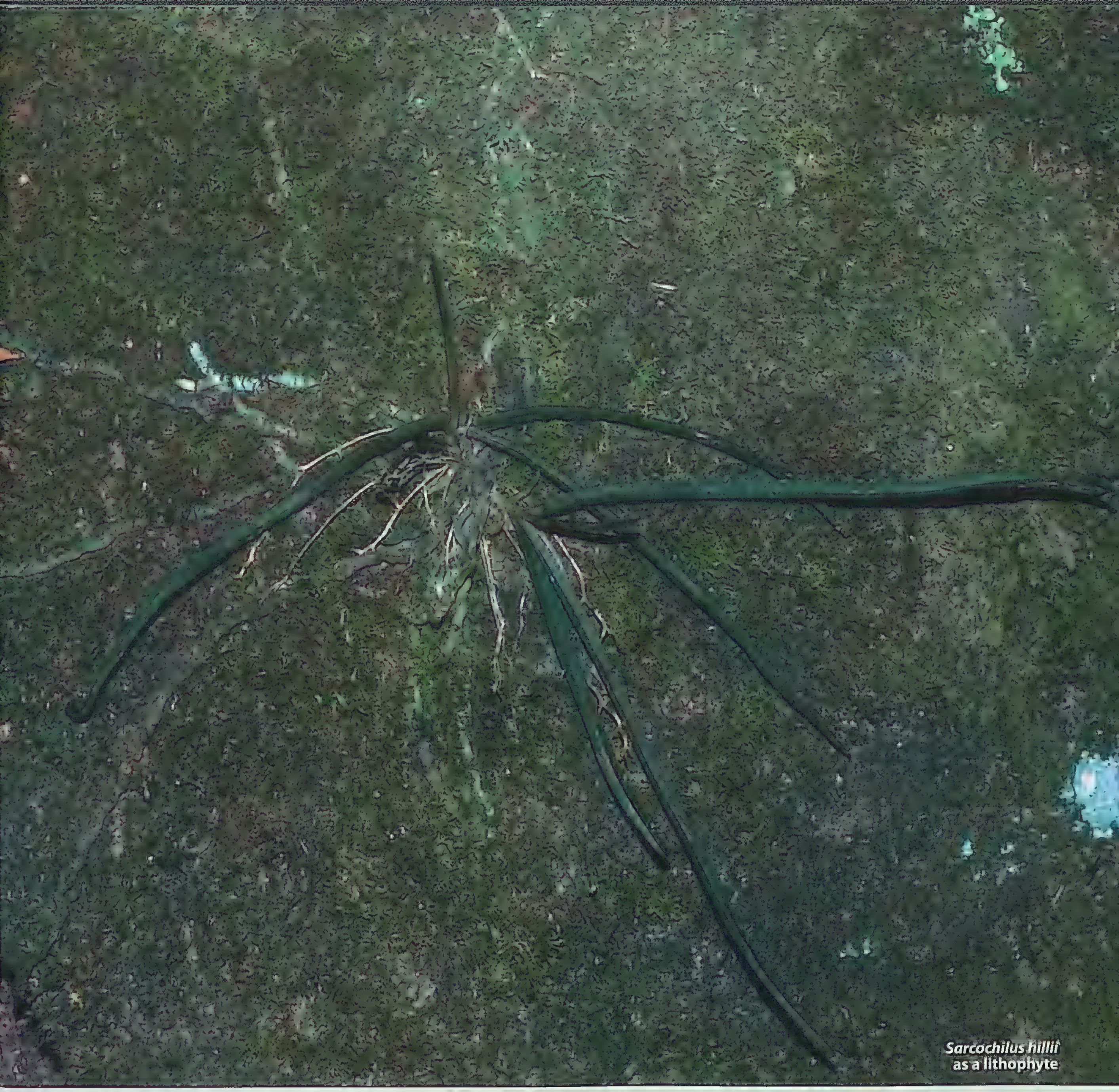

Sarcochilus hillii as a lithophyte

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The point of this exercise is not to point out the number of orchids which may or may not be considered common to my particular part of Australia, as some of these species obviously occur in some other habitats (albeit similar) but that they may be common to some areas only and orchid explorers should not expect to encounter any of them just because the habitat is considered appropriate. Be aware also that *Cymbidium suave* is found in all habitats except rock shelf. I have lost count of how many times during an outing I have been surprised and disappointed at not seeing a species despite the habitat being perfect for species A or species B.

The moral is, be thankful for what you have despite it being considered common but never give up hope of finding something new or different as this is what keeps orchid people interested and youthful. ■

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Nowra, NSW
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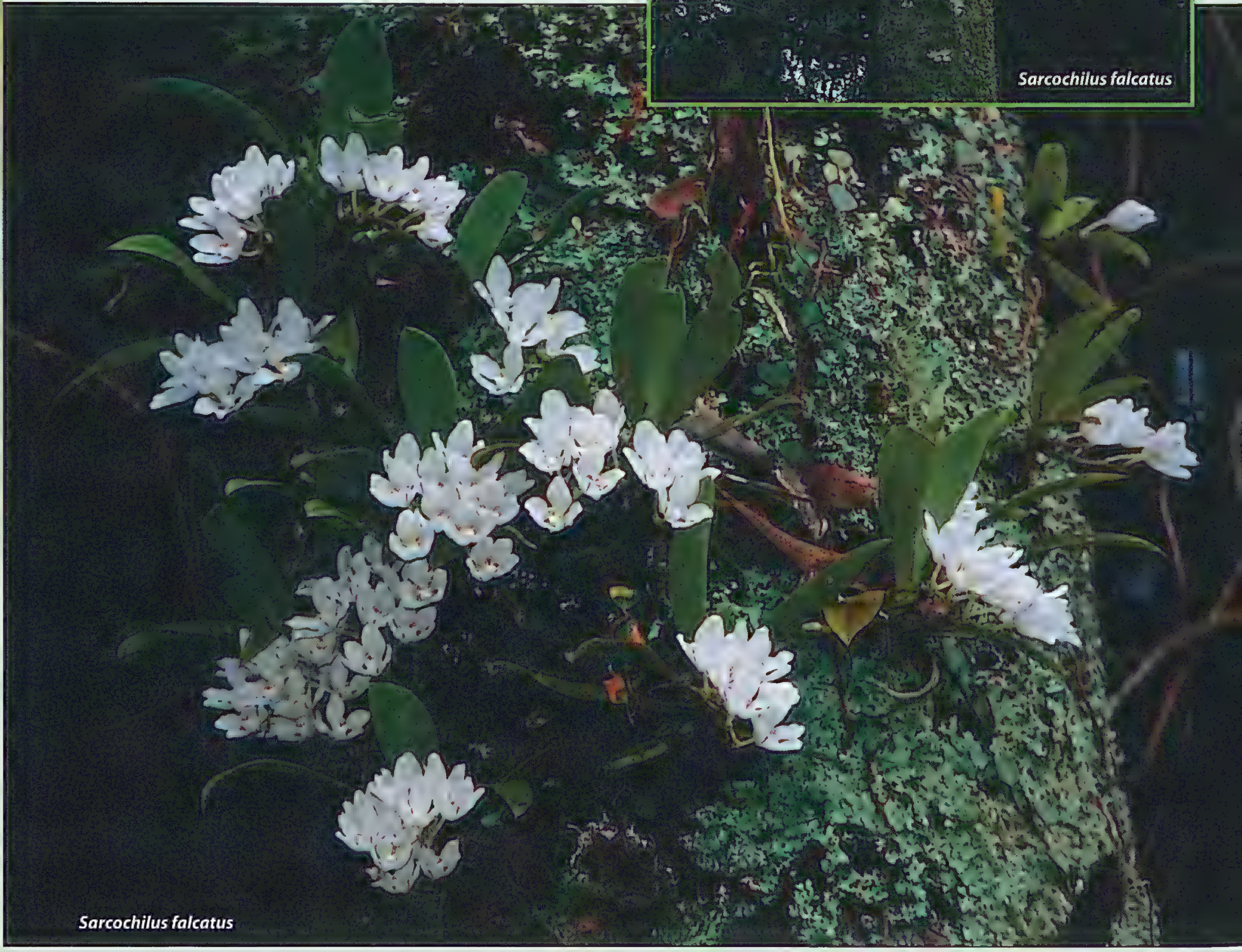
Conservation Director
Australian Orchid Council

Sarcochilus falcatus



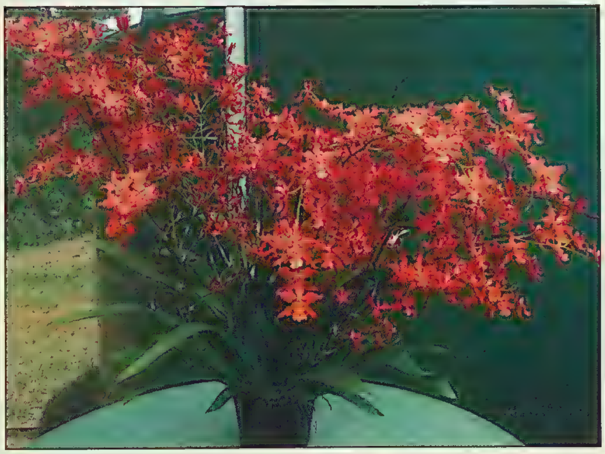
Sarcochilus falcatus

Orchid Road Test

by Sam Cowie

Wilsonara Space Mine 'Red Rendezvous'

Sometimes you look at an orchid hybrid, then at its parents and just wonder if what you're seeing is right. Sometimes the orchid is such a great little plant with prolific spike and flower production that you don't really care about its heritage being correct, you just enjoy what it does. To me, *Wilsonara* Space Mine 'Red Rendezvous' has always been one of those plants. As a hybridiser I look at the heritage and wonder, but as a commercial grower I just love it for easy growing and double spikes per growth. I always recommend *Wilsonara* Space Mine if someone is after a good compact red orchid for their collection.



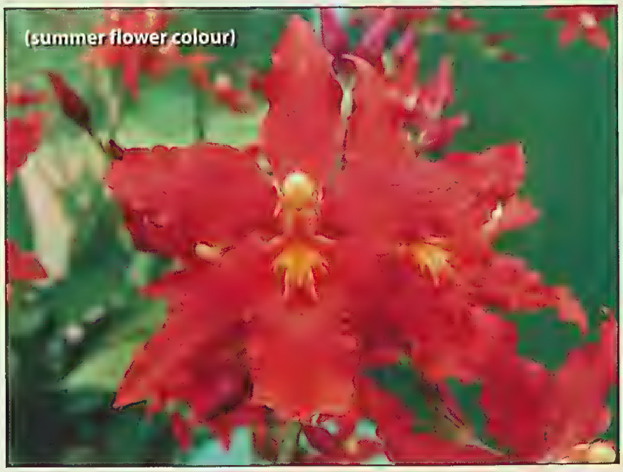
When you look at OrchidWiz you see that the pod parent is *Oncidium sphacelatum,* that weed of an orchid that seems to be in every orchid growers garden and known for its immense sprays of flowers in spring. The pollen parent is *Odontioda* Carmine which I'm not familiar with, and is a mix of *Cochlioda noezliana*, *Odontoglossum nobile* and *Odontoglossum crispum*. What throws me is the *Oncidium sphacelatum* parentage, as Space Mine doesn't get big spikes and the flower is a single pure colour. Then on the other hand it grows extremely well in South East Queensland and is tolerant of warm to hot weather. From memory the breeder told me that the selection 'Red Rendezvous' was the only red out of the whole seedling batch and was the only one picked to mericlone.

From a growing perspective you cannot fault Space Mine. It's an easy grower in pretty much all temperatures and seems to grow year round without any down time or dormancy. When grown under cover it has very clean foliage with only the occasional bacterial spotting during prolonged rainy weather and poor ventilation. Space Mine isn't a big plant and doesn't like to be over potted. Although the photo shows a specimen in a 150mm pot, I wouldn't recommend ever needing anything more than a 125mm pot for even large specimens. Even small plants will produce double spikes easily and well grown specimens will be profuse flowerers sometimes two or three times per year. It's not uncommon to see 4 or more spikes on a well grown Space Mine in a 100mm pot.

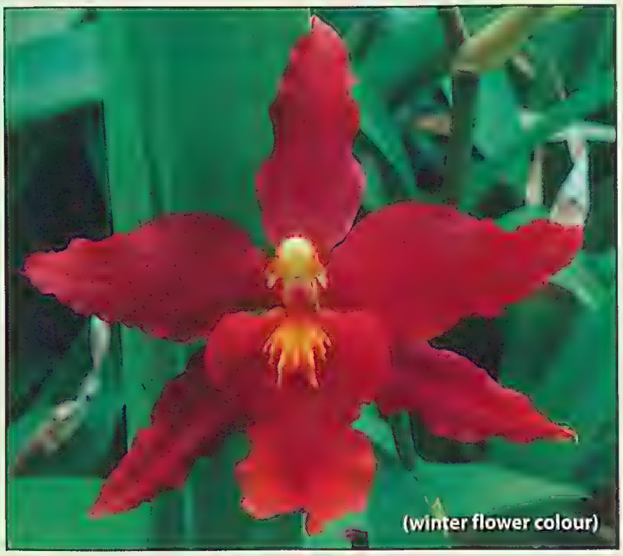
Space Mine is both a compact Orchid and a relatively short spiker. Most spikes in a 100mm pot will top out at 450 to 550mm in height, with plentiful branching and numerous flowers. I've yet to see any Space Mine go above 750mm in spike height. Flowers are around 50mm in diameter and tend to be on the fuller side of a starry shape, although summer flowers can start to open up a little more towards the starry shape. As you can see in the photos Space Mine is a colour variable flower, with an orange red in summer and a fuller ruby red in winter.

All of our Space Mine are grown in a Coco Husk/Perlite mix and prefer to stay moist but well drained. If growing in bark I'd recommend a medium bark with a bit of smaller bark mixed in to decrease Air Filled Porosity (AFP) and increase water holding capacity. The biggest pest is garlic or bush snails that get in and eat the new root tips. Like all *Oncidium* Intergenerics you need to watch your bulbs so that you get the watering right. A nice full or plump bulb is what you're after, although excessive spike production will drain the bulb a bit no matter how much you water or the optimal root growth and mass. Keep any eye on the root growth as well, as poor drainage will cause root damage, and snails will cause significant damage to the point that new root growth will stop.

Sam Cowie
Kin Kin, Qld



(summer flower colour)



(winter flower colour)

Spiranthes elytra (Orchidaceae: Spiranthinae), a new species of Spiral Orchid from South Australia

by David L. Jones and Robert J. Bates

Abstract

Spiranthes elytra, a new species with affinities to *Spiranthes australis* R.Br., is described from the Fleurieu Peninsula, South Australia. This endangered species has a restricted distribution which has been impacted by agricultural practices and urbanisation. Notes on distribution, ecology and conservation status are provided along with illustrations.

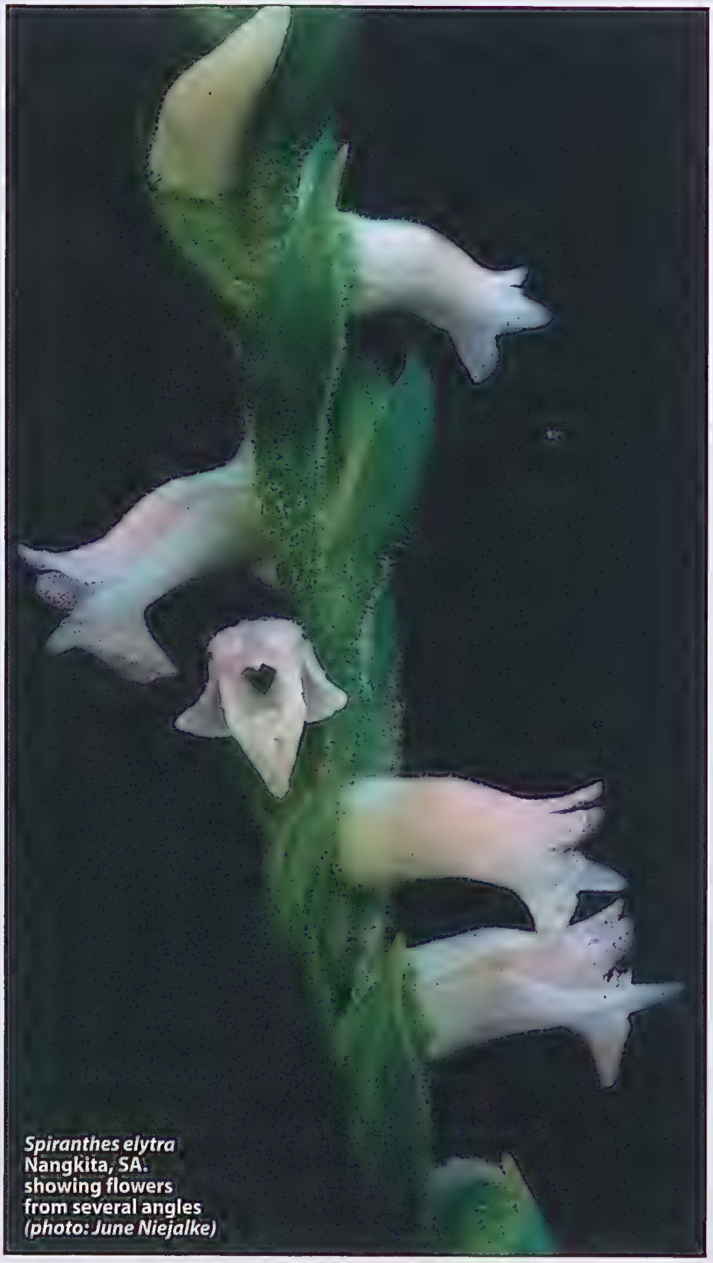
Key Words

Orchidaceae, Spiranthes elytra, Spiranthes australis, new species, South Australia, Australian flora.

Introduction

The first Australian *Spiranthes* (from Port Jackson, NSW) was named by Robert Brown as *Neottia australis* (Brown 1810) but later recognised as *Spiranthes* by John Lindley who made the combination *Spiranthes australis* (R.Br.) Lindley (Lindley 1840). The name *Spiranthes australis* was used for the South Australian spiral orchids (ladies tresses) by Tate (1889) and Black (1922) yet for some obscure reason all South Australian references for the next seventy years used the name *Spiranthes sinensis* (Pers.) Ames (an Asian species).

Bates (1980) questioned the concept of a single South Australian taxon and discussed two naturally occurring variants, namely a large, outcrossing, swamp form with pink and white flowers and a late-flowered, self pollinating, white, tubular-flowered peat bog plant (here described as new). According to Jones (2008) the name *Spiranthes australis* should be applied only to populations from coastal and near-coastal areas of eastern Australia. *Spiranthes australis,* which is distributed from south-eastern Queensland to Tasmania, occurs in a range of grassy and swampy habitats. It requires reliable rainfall and probably does not occur in South Australia where late springs and summers are far too dry. One of us (R.J.B) holds the view that the common South Australian swamp *Spiranthes* with pale pink and white flowers is actually *Spiranthes alticola* D.L.Jones.



Spiranthes elytra
Nangkita, SA.
showing flowers
from several angles
(photo: June Niejalke)

Taxonomy

Spiranthes elytra D.L.Jones & R.J.Bates ***sp. nov.*** With affinity to *Spiranthes australis* (R. Br.) Lindley but differing by taller habit, longer, deeper green leaves, more numerous sterile bracts, larger closely appressed floral bracts which sheath the ovary and often also the base of the flower (the flowers of *S. australis* emerge completely from their smaller bracts), crystalline white or greenish-white flowers which do not overlap (pink and white closely overlapping flowers in *S. australis*), a narrower strongly tubular corolla, the labellum widest at the base (widest towards the middle in *S. australis*), the midlobe with sparsely convoluted and shortly lobed margins (densely convoluted and deeply lobed in *S. australis*).

Type: South Australia, Fleurieu Peninsula, swamps between Parawa and Deep Creek Conservation Park on south side of road, 5 Feb. 1981, *R. Bates 909* (holo AD).

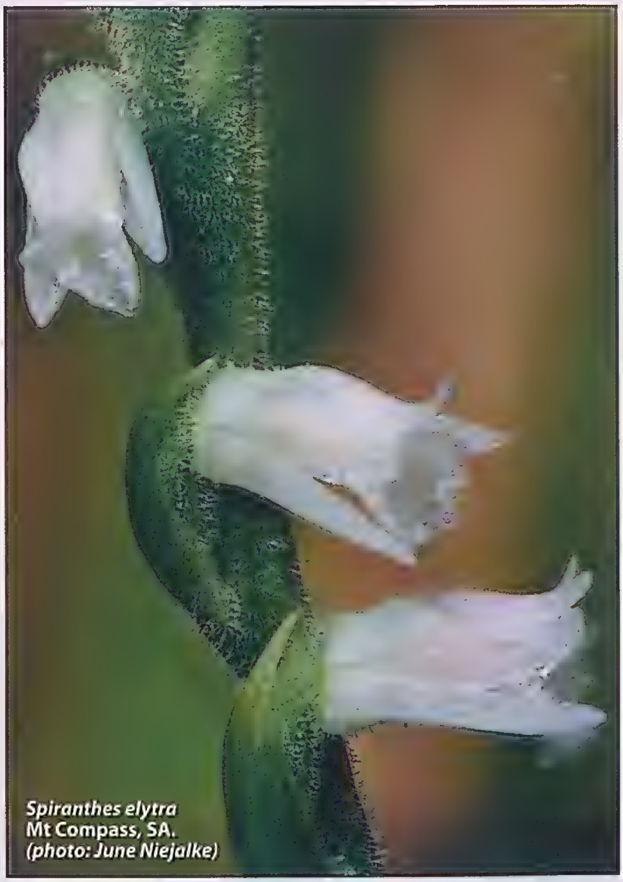
Illustrations: Bates & Weber 1990 in *Orchids of South Australia*, plate 194, as a self pollinated form of *Spiranthes sinensis*. Bates 2008- 2014 as "*Spiranthes* species Late Selfing White" (*R. Bates 909*); a name also used in eflora South Australia (2014).

Description: *Perennial non tuberous terrestrial herb*, solitary or in groups. *Leaves* sessile, 1-5 in a radical cluster, green at anthesis; *lamina* linear lanceolate, 50-200 mm long, 5-10 mm wide, deep green, glabrous, strongly veined, margins entire, apex subacute. *Scape* 20-40 cm tall, 3-5 mm diam., rigid, green, glandular-pubescent, 20-50 flowered. *Sterile bracts* 2-5, lanceolate, clasping at the base, variable, 10-40 mm long, 3-6 mm wide, base glandular-pubescent. *Floral bracts* ovate-lanceolate, 5-8 mm long, 3-5 mm wide, base glandular-pubescent, green, with a long, usually curved acuminate apex, often white tipped. *Ovaries* subsessile, 5-8 mm long, 2-3 mm wide, curved, sub-cylindrical, densely glandular-pubescent. *Flowers* white, crystalline, c. 5 mm long, 1-2 mm wide, the segments closely imbricate or partially fused to form a tubular structure for much of their length; *sepals* to 5 mm long, linear-oblong, their free tips reflexed, acuminate; *petals* similar but more triangular, to 4 mm long, spreading with age and recurved. *Labellum* delicately fragile, often damaged and turning brown within a day or two of anthesis; lamina triangular to cordate, 3-4 mm long and almost as broad, decurved near the middle, distal margins incurved, irregularly folded, sparsely laciniate, crystalline; apex emerging from the floral tube on some flowers but remaining enclosed in others. *Column* porrect, hidden, c. 4 mm long, c. 2 mm wide; anther c. 2 mm long, c. 1.5 mm wide. *Pollinia* c. 1.3 mm long, pale yellow, sticky. *Stigma* transverse, c. 1.5 mm across. *Capsules* 7-10 mm long, 3-4 mm wide, glandular-pubescent.

Distribution: Endemic in South Australia where currently thought to be restricted to peaty swamps of the Fleurieu Peninsula. Reports of it in the lower South-east (SE) have not been verified.

Habitat: Grows in moist to wet peaty bogs along with sedges, ferns and mosses. A favoured microhabitat is on raised peaty mounds among stunted shrubs of *Leptospermum continentale* and *Melaleuca squarrosa*.

Recognition: Distinguished by its often tall scapes of small tubular crystalline white flowers which frequently only open partly, acuminate closely appressed acuminate floral bracts which enclose the ovaries and often part of the flower, and the triangular to cordate labellum with the distal margins incurved, irregularly folded and sparsely laciniate.



Spiranthes elytra
Mt Compass, SA.
(photo: June Niejalke)

Conservation status: Of restricted distribution, its continued survival severely threatened by many human actions and not known to be conserved; we suggest a ROTAP code of endangered (2E) following the criteria of Briggs & Leigh (1996). Many sites where this orchid previously occurred have been destroyed by clearing for agriculture, pugging by cattle, cultivation of lucerne and weed invasion. More significantly many of the peaty bogs are drying due to changes in hydrology. An intensive survey is required to assess how many populations of the orchid survive.

Etymology: The Greek *elytron*, cover, sheath, in reference to the closely appressed floral bracts which enclose the ovaries and often also the base of the flowers.

Other selected collections seen at AD: all from Fleurieu Peninsula South Australia: Mt Compass, 6 Feb. 1971, *A.M. Ashby 3751* (these plants are the subject of a painting by Ashby); Cleland Gully Road (Emu Wren Swamp) Tooperang, 13 Feb. 1994, *R Bates s.n.* (AD 99530116); Swamps between Parawa and Deep Creek on s side of road, 5 Feb. 1981, *R. Bates 909* (ten specimens 20-40 cm tall); Spring Mount in swamps but only in high area grazed for 50 years, Jan. 1980, *R. Bates 6151*; Tooperang, 17 Jan. 1992, *D.E. Murfet 1451 & R.L. Taplin*; Three km from Mt Compass on way to Victor Harbor, 200m to east of road, 21 Feb. 1965, *RC. Nash 144*.

Key to Australian *Spiranthes*

1. Flowers pink and white 2

1a. Flowers white or greenish-white 3

2. Perianth segments spreading widely, labellum margins widely flared, labellum lateral lobes about as wide as the midlobe .... *Spiranthes alticola*

2a. Perianth segments close to the labellum, labellum tubular with mostly incurved margins, labellum lateral lobes wider than the midlobe .... *Spiranthes australis*

3. Flowers closely appressed or overlapping, floral bracts not enclosing the ovary, labellum midlobe densely convoluted and deeply lobed .... *Spiranthes australis/alticola*

3. Flowers not overlapping, floral bracts enclosing the ovary and often the base of the flower, labellum midlobe sparsely convoluted and shortly lobed .... *Spiranthes elytra*

Acknowledgements

Thanks to the staff at AD for allowing access to collections, particularly Juergen Kellermann and to librarian, Lorae West. We are also grateful to members of the Native Orchid Society of South Australia (NOSSA), especially June Niejalke, Barb & Ken Bayley and Ed Lowrey for discussions, also Joe Quarmby for advice. Thank you to June Niejalke and John Roberts for the images used in this paper.

References

- Bates R.J. (1980) A Review of South Australian *Spiranthes*, *Orchadian* 6(8): 186.
- Bates R.J. & Weber J.Z. (1990). *Orchids of South Australia*, Govt Printer, Adelaide (plates 193 and 194).
- Bates R.J. (2007-2014) *Orchids of South Australia* electronic versions Native Orchid Society of South Australia (NOSSA).
- Black J.M. (1922). *Flora of South Australia* part 1, Govt Printer, South Australia.
- Briggs, J.D. & Leigh, J.H. (1996) *Rare or Threatened Australian Plants*, Revised edition (CSIRO and Australian Nature Conservation Agency).
- Brown, R. (1810). *Prodr. Florae Nov. Holl.*, et Insulae van Diemen, London.
- Clements, M.A. (1989). Catalogue of Australian Orchidaceae, *Austral. Orch. Res.* 1: 1-160.
- Jones D.L. (2008). Twelve new species of Orchidaceae from south-eastern Australia, *Orchadian* 15(12): 546-558.
- Lindley (1840). *Spiranthes australis*, *Edwards's Bot. Register 10 subt.* 823.
- Tate R. (1889). *South Australian Flora*, Govt Printer, South Australia.

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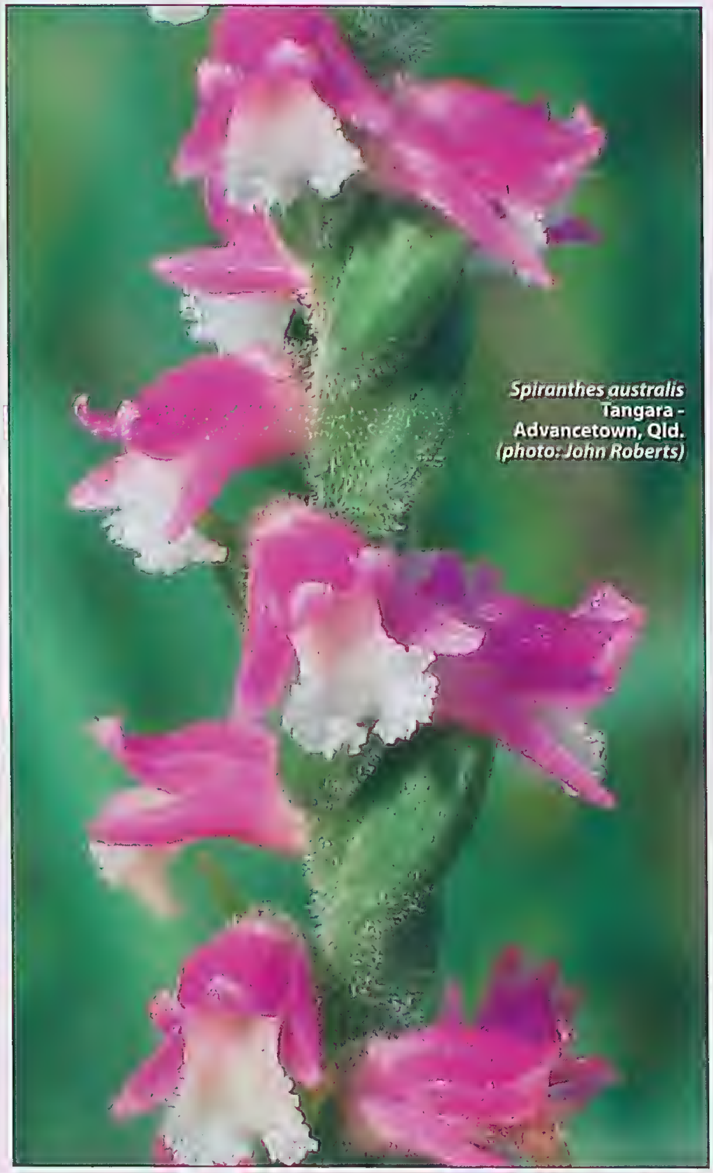

Spiranthes australis
Tangara -
Advancetown, Qld.
(photo: John Roberts)

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CYMBIDIUM CULTURE

Cymbidiums are what most people first think of as orchids. This genus is easy to grow and very popular in cooler, temperate climates of New South Wales and the southern states.

Shade is necessary from hot sun. A shade or bush house covered with 50% shade is ideal. In some areas 70% will be necessary. Alternatively, dappled shade from a tree or other plants will suffice. Cymbidiums need plenty of filtered sun to flower well. These orchids will grow well, but rarely flower in full shade. If you don't have a greenhouse, it may be necessary to move the pot from more sun in Winter to a shadier spot in Summer. If you wish to plant cymbidiums in a garden, provide dappled shade or an Easterly aspect. Never cover the roots with heavy soil or clay, rather place the plant on top of the soil and mound around it with cymbidium compost.

Temperature. Happy to grow in a wide range of temperatures, cymbidiums will tolerate light frost as long as buds are protected. At the other end of the scale, very hot days are tolerated but plants will benefit from a substantial overnight drop in temperature. This drop in temperature will help initiate flower stems.

Watering. Cymbidiums like to stay damp but not wet. To achieve this plants may need to be watered daily during hot, dry weather. Watering in the late afternoon/evening will also help chill the plants. In Winter, watering weekly should suffice.

Compost needs to be well aerated and free draining, but still remain damp for a reasonable period. Most cymbidium compost available from specialist nurseries is ideal, beware of generic brands from supermarkets. These are often of inferior quality. Graded and washed Coconut Husk Chip, such as OrchidMate is a popular media amongst orchid growers. OrchidMate is prewashed and graded; just soak for a few hours & it it ready to use. Treated pine bark, perlite or a blend of these is also suitable.

Repotting. Cymbidiums are best repotted during the cooler months, or if they are flowering, as soon as possible after flowering. To avoid stress to the plants, do not repot during Summer. If dividing plants, make sure at least 3-4 bulbs are left together. Never reuse compost, sterilise tools and preused pots with bleach or a sugar soap concentrate. After dividing, place plants in a shady area for a few weeks and water sparingly.

Fertiliser. Most effective is water soluable fertiliser. Use a formula recommended for flowering plants. This can be applied every watering at quarter strength or at recommended strength every third watering. A little slow release fertiliser is OK, but must be buried in the pot.

Pests & Disease. Red spider or spidermite is troublesome in Summer, especially in warmer climates. Control with miticide, Pest Oil or predatory mites. Scale is easily controlled by Rogor or Pest Oil. Some disease is prevalent in warm, wet weather. Black spots on leaves is easily controlled by spraying with Mancozeb or lime water. Bulb rot can be prevented by using Yates Anti Rot. Always use at manufacturers recommended levels, if in doubt seek advice from a nursery or experienced grower.

AUSTRALIAN NATIVE ORCHID CULTURE

DENDROBIUM & SARCOCHILUS

The popularity of Australian Native Orchids has grown dramatically in recent years. New cultivars have provided growers with a broader range of colours and styles that are easy to grow and flower.

Environment. Found growing wild in most areas on the east coast of Australia it is easy to provide suitable conditions in this area. Dendrobiums prefer bright filtered light, 50%- 70% shadecloth is ideal, or a tree or similar screen allowing dappled sunlight is perfect. Sarcochilus are usually found in heavier shade areas, about 90% shade and somewhat higher humidity than Dendrobiums is beneficial.

Temperature. New South Wales coastal temperatures are OK, good air movement is important, especially during very hot or cold periods so natural air flow should not be impeded. Sarcochilus enjoy temperatures up to 30°, over this try to minimise maximum temperatures, by providing more shade or air movement.

Watering. Perfect drainage is very important, many Australian Native Orchids grow on trees and dry off quickly after rain. Water thoroughly then allow plants to dry out completely before rewatering. Water regularly in summer, sparingly in winter. If you receive regular winter rain, a solid roof over plants may be necessary to control watering in cold weather.

Compost must be free draining. OrchidMate Coconut Husk Chips or treated pine bark is ideal. Some growers like to add 10% coarse perlite, gravel or styrene to the mix. Adding graded charcoal is also popular. As a guide, use medium chips in 100mm pots, large chips in 150mm pots & extra large chips in 200mmm pots or bigger. If established in the garden, a gravel bed under the plant will help with drainage, or attach firmly to a tree or rock and tie a pad of coconut fibre or similar over the root mass.

Repotting. Dendrobiums are best done soon after flowering, at the beginning of the growing season. We leave Sarcochilus till March/April after the worst of the hot weather has past. Sarc's grow all year, but experience most growth in this area during Autumn/Winter. Ensure pots have adequate drainage and are just big enough to contain the root system of the plant to be potted.

Fertilise regularly, especially during the growing season, using a soluable fertiliser for flowering plants, low in nitrogen and high in potassium. Plants will benefit from an occasional dusting with Dolomite.

Pests & Disease. Generally hardy and resilient, Australian Native Dendrobiums and Sarcochilus can sometimes be attacked by scale, aphid or spidermite. Treat with a recommended insecticide such as Rogor or Pest Oil. Fungal infections are rare provided good air movement is maintained during wet weather. Use Mancozeb or lime water for leaf infections & Yates Anti Rot will prevent bulb rot. Dendrobium beetle can be a problem during the warmer months. Beetles are easily caught or spraying with Carbaryl is very effective.

PHALAENOPSIS CULTURE

Phalaenopsis are a group of plants that grow in shady, humid conditions throughout the Asian tropics and extend into Northern Australia. They are arguably the most popular group of orchids grown in the world today, being particularly popular throughout the United States and Europe where they are regarded as one of the easiest orchids to grow indoors.

Temperature & Atmosphere Requirements. Phalaenopsis enjoy relatively stable temperatures. A minimum temperature of 15° celsius and a maximum of 30° is optimal, however plants will tolerate temps of up to 5° more extreme than this for short periods. Growing these plants outdoors in New South Wales will require some artificial heating in the Winter and cooling in the Summer. However their requirements fall almost perfectly within the comfort zone we enjoy inside the house. Phalaenopsis also require medium to high humidity. This can be achieved by placing the plants on a saucer of gravel, wet the gravel but be sure the base of the pot is above the water level. As the water evaporates, adequate humidity will be provided. Alternatively, mist the plants daily.

Light. Phalaenopsis enjoy low light and must be protected from direct, unfiltered sunlight. Outdoors sufficient shade so that on a sunny day a barely discernible shadow is cast is ideal. Indoors a brightly lit room out of direct sun is suitable.

Watering & Fertilising. One of the secrets of growing Phallies is to keep the roots just damp but the leaves as dry as possible. This means that the compost should be allowed to nearly dry out before watering. After watering dry the leaves off as quickly as possible, especially any water laying in the crown of the plant where the leaves join. To help this avoid watering the leaves, or place the plants in a breezy spot for an hour or two after watering, even removing excess water from the leaves with a tissue will serve the purpose.

Fertilise with a recommended soluable orchid fertiliser at quarter strength every watering or at half strength every second watering. A complete fertiliser low in nitrogen is ideal, use this formula all year round.

Potting, Pests & Diseases. Keep plants in as small a pot as possible, a few roots growing out of the pot will not harm the plant and is not necessarily a reason to pot up the plant. Use a course, free draining material such as pine bark. Some growers prefer sphagnum moss, use long strand grade and replace annually. Apart from crown rot which can be avoided by careful watering, Phalaenopsis can suffer attack from Mealy Bugs. These appear as small furry white pests, usually under the leaves. They can be sprayed with Pyrethrum or a chemical insecticide, Pest Oil or wet them with equal parts of Methylated spirits and water using a cotton bud or small cloth.

Phalaenopsis are very rewarding plants to grow and flowers last up to 12 weeks. When flowers have withered, cut the flower stem off between the third and fourth notch from the base. The old stem will then shoot and flower a second time. Mature plants will flower twice each year so flowering can be achieved for up to half the year. Flowers are available in white, pink or yellow or with variations of spotting or veining on these backgrounds.

CATTLEYA CULTURE

Pronounced KAT-lee-uh, this group of orchids originate from a large area of tropical and sub-tropical America. They occur in many sizes, shapes and colours but are best known for their large flamboyant blooms. Most grow as epiphytes, or air plants. They have large pseudobulbs used to store water and have thick, fleshy roots that have the ability to collect moisture from the air.

Light is important for good flowering. About 50% is optimal, however if leaves overheat in summer this may need to be increased to 70%. Leaves should be medium green colour and pseudobulbs rigid and erect without staking. Excessive shading will reduce flowering dramatically and lead to soft, floppy growths.

Temperature should range between a minimum of 5-7° celcius in Winter to a maximum of about 30°-35° in Summer. I suggest you avoid watering if the temperature falls below 10°. Small plants need to be protected from temperature extremes. High day temperatures, up to 35° can be tolerated if humidity, air circulation and shading are increased.

Water can be provided in two ways, in the pot by watering and in the air by humidity. For a plant growing in good open media, watering twice each week in Summer and once per fortnight in Winter is sufficient. In Summer avoid watering during the heat of the day, in Winter only water on a bright sunny morning. The root system on these plants can easily be damaged by excess water. If in doubt, defer watering.

Humidity is important to Cattleyas as roots prefer to grow in humid air rather than to be wet. Humidity needs to range from 50% to 80%, about 60% is ideal. In Winter watering can be delayed by wetting the greenhouse floor and circulating air around the plants. This technique can also help to cool the plants in Summer. If you live in a Southern Winter rainfall area, it may be neccessary to grow your Cattleyas under a solid cover so watering can be controlled during Winter.

Fertilise with a complete balanced NPK fertiliser for flowering plants. Apply fertiliser with the water every second watering, this may mean every week in Summer and once or twice per month in Winter.

Pots & Medium. Pots should be shallow; ie width greater than the depth, & should have plenty of holes to allow perfect drainage. Media needs to be coarse and long lasting. OrchidMate coconut husk chips, treated pine bark or graded charcoal is ideal. As a guide, use medium grade (10mm) in 100mm pots, large grade (15mm) in 150mm pots & extra large grade (20mm) in 200mmm pots or larger.

Pests & Disease. Cattleyas, apart from root rot caused by overwatering, can be attacked by pests such as scale and mealy bug. Check under dead bracks on old bulbs for hidden scale. This is easily controlled by Rogor or Pest Oil. Slugs and snails love fresh root tips, as do cockroaches, so check for these pests if root tips are being damaged. Hanging plants or growing on mesh benches can help, but snail bait may be necessary.

PAPHIOPEDILUM (SLIPPER ORCHIDS) CULTURE

Paphiopedilums, more commonly known as Slipper Orchids, are shade loving plants from areas throughout Asia where they usually grow amongst rocks, moss and leaf litter in damp but well drained positions. Blooms are long lasting and are available in a range of colours. There are three main styles of flowers, popular amongst growers. These are the complex hybrids which have large round flowers with broad segments and bloom during the Winter. The second group are the maudiae types which have attractive tessillated leaves and smaller flowers. The third group are the multiflorals, sometimes with 4 or 5 flowers on a stem. They have long strap like green leaves and are the slowest to grow.

Temperature & Light. Protection from frosts is necessary, especially for the maudiae and multifloral types, otherwise slippers are tolerant of a broad range of temperatures. Slippers thrive in conditions soft ferns such as maidenhair enjoy. The multiflora group will enjoy a little brighter light than the other two groups.

Watering & Fertilising. Watering should be sufficient to keep the root system just damp. It is important to avoid over watering even short dry periods are OK. The root system on Paphs can be easily damaged if the potting medium is old or the plants are overwatered. As a guide, water twice a week in Summer and once a week in Winter, depending on the weather of course. It is best to water during the morning in Winter and evenings during Summer. Try to avoid water laying on the leaves for lengthy periods. Include a balanced (flowering formula) fertiliser into the water at half the recommended strength, every second watering. A dusting of Dolomite occasionally will add calcium and help keep the media sweet.

Potting. A standard pot just big enough to contain the root system is adequate. Use a mix of large grade OrchidMate coconut husk chips or pine bark with added perlite, styrene or charcoal. Media must be coarse enough to allow good drainage but still remain damp for a few days. As a guide, in a 150mm pot use 10-15mm bark. Replace the media regularly, at least every two years. Paphs dislike media that is starting to break down and roots will easily be damaged if media is not replaced.

Pests & Disease. Slippers appear resistant to orchid virus. Fungus can develop on the leaves or in the leaf axils, usually due to overwatering or poor watering practices (refer to previous paragraph). Mancozeb fungicide will help. Mealy bug can sometimes attack leaves and roots but is easily controlled with Rogor or similar. These plants are relatively pest free.

Air Movement. Paphs are usually grown in confined spaces, protected from hot, dry winds. However, to help dry off the leaves and prevent fungal infections, the air should be kept moving. It may be useful to install a cheap fan to just stir the air.

Paphiopedilums are attractive plants with curious and long lasting flowers. They are very rewarding to grow in a shady, moist environment and make an attractive indoor decoration when blooming.

SOFTCANE (NOBILE TYPE) DENDROBIUMS

Softcane, or Nobile type Dendrobiums grow naturally in Northern India & Thailand at elevations up to 1500 metres in the foothills of the Himalayan mountains.

Temperature These species and their hybrids are hardy plants that will tolerate temperatures from 3° celcius to temperatures in the high thirties. They are easy plants to grow providing some basic rules are followed.

Watering & Fertilising. To grow Softcane Dendrobiums well, different seasonal treatment is required. After flowering in October increase watering & gradually increase fertiliser. Soluable 'flower-booster' fertiliser at recommended strength is preferred. By November when growths are 100mm or more high, water plants every second day and include fertiliser at least once per week. Maintain this treatment until new growths are nearly mature, say February or March. Reduce water & fertiliser so that by April, plants are receiving no nitrogen fertiliser at all. Water sparingly, just enough to prevent bulbs from shrivelling, until plants flower in Spring.

Light. Cover the plants with 30-50% shade in Summer to prevent burn to new growths, however, these plants love lots of Winter light, even full sun during the Winter months is beneficial to flowering. This may involve removing shadecloth in Winter or moving the plants out into the sun at that time. Some growers even hang them on the clothes line. As the heat of the sun increases, usually about flowering time, replace the shadecloth or move the plants back under cover.

Compost. Plants should be grown in a well drained medium such as bark chips, washed coconut husk chips, perlite, charcoal or a mix of all four. Even some added styrene, gravel or charcoal will make a good free draining medium. Pots should be as small as possible and avoid over potting. Repot soon after flowering and before new growth starts to develop roots. These orchids will grow onto trees in the gardens. Callistemon, Frangipani, Jacaranda or similar are suitable.

Softcane Dendrobiums are easy orchids to grow provided they are given plenty of water & fertiliser in Summer, with no nitrogen fertiliser, little water & plenty of light during Winter.

If you would like some hints on growing orchids - not included here , please contact us. If you are having difficulty identifying a plant,we can help. Just email or post a photo of the plant and flower.

Notes are intended as a guide only. For further information contact the Nursery.
Societies are welcome to reproduce these notes, provided suitable acknowledgment is given.

ONCIDIUM CULTURE

This diverse group originate in South America. Some species are tropical, but most prefer sub-tropical or temperate climates. The almost endless variety of colours & flower shape have made this group popular.

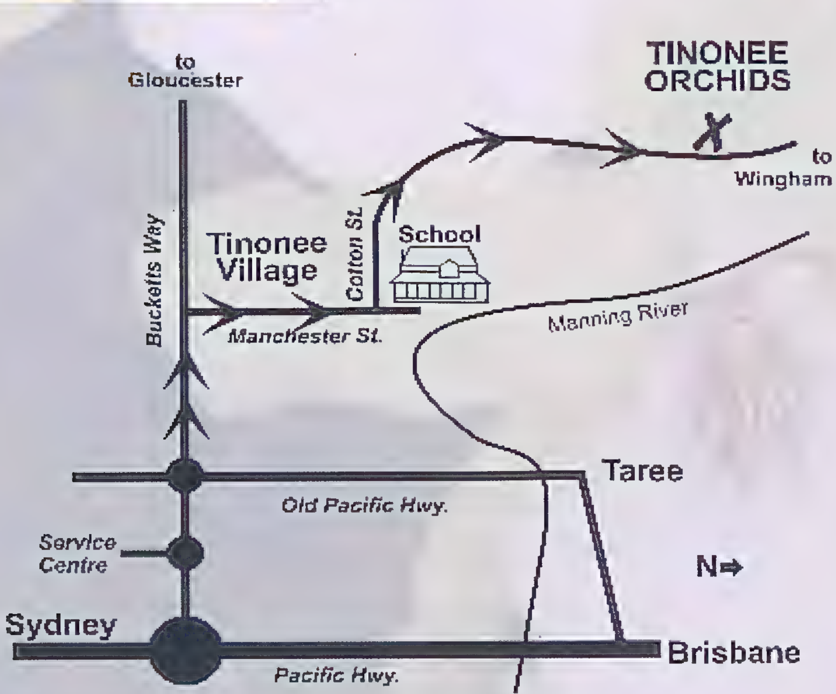
Temperature & Light. Some of the spidery style flowers (Brassia's) are sensitive to cold, so a 5° or 6° celcius minimum is recommended. Medium to heavy shade is preferred.

Watering & Fertilising. Water regularly whilst growth is active, then water sparingly after growth has matured. Include a soluable fertiliser, recommended for flowering plants, with every second or third watering all year round. As a general practice, try not to wet the leaves during hot, sunny weather. Favour watering during the evening in Summer. Keep them as dry as possible during very cold weather.

Potting. These epiphytic orchids need good drainage. A blended medium which is well draining is ideal and plants prefer to be cramped in the pot. Some of the dancing lady style also do well on mounts of tree fern fibre or even cork.

Pests & Disease. Most oncidiums have soft leaves that are prone to black spot & some leaf spot diseases. Regular (every month or so) application of Mancozeb during Summer will help prevent this. Mealy bug can sometimes attack leaves and roots but is easily controlled with Rogor or similar. These plants are relatively pest free.

Most of the modern hybrids will flower regularly during the year. Look for Odontoglossums, Miltassias's, Beallara's and many others in the Oncidium family.



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New Flask Offerings from Sunset Valley Orchids

by Fred Clarke

I am looking forward to seeing many of you at "Orchids in Paradise", the Australian Orchid Council Conference and Show, being held in sunny subtropical Mackay, Queensland this 18-23 September 2015. I'll be giving two talks: "What's Hot in Spotted and Splashed Cattleyas" and "*Catasetum* Species and Hybrids, and How to Grow Them." Both of these talks have been getting rave reviews, and I'm sure that you'll enjoy them. See you in September!

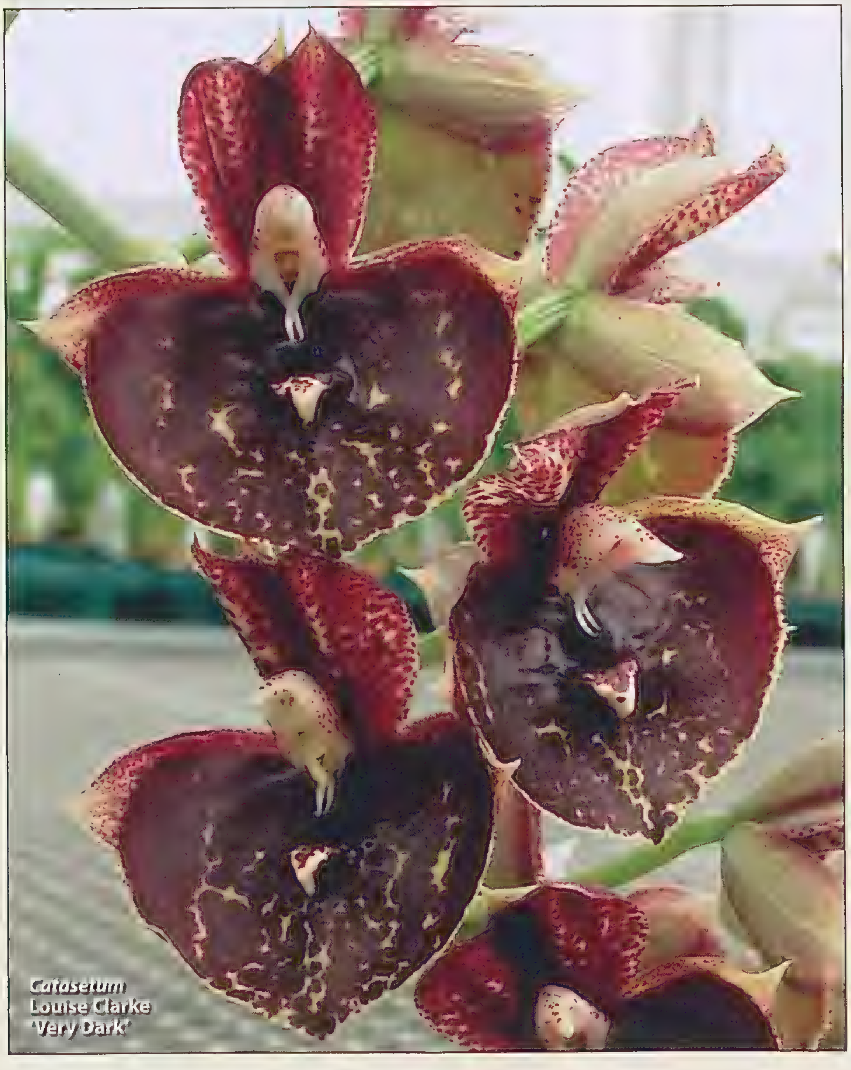
I will bring some of the very latest flasks that represent some of the top breeding in Catasetinae and *Cattleya* alliance plants to the show. Here is the link to the web page and list:

http://sunsetvalleyorchids.com/htm/offerings_flasks-oz.html

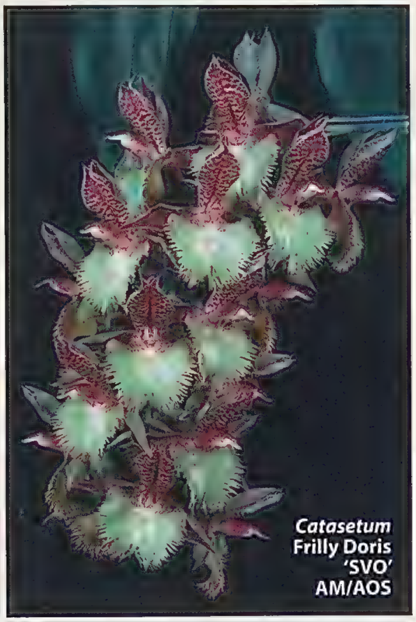
Some of the standouts include:

SVO 6167
(*Catasetum* Louise Clarke 'Very Dark' x *Catasetum* Frilly Doris 'SVO' AM/AOS)

These will bloom with 15-18 large dark flowers with coarsely frilled lips. This style of breeding is very productive and has produced a number of successful crosses.



Catasetum Louise Clarke 'Very Dark'



Catasetum Frilly Doris 'SVO' AM/AOS

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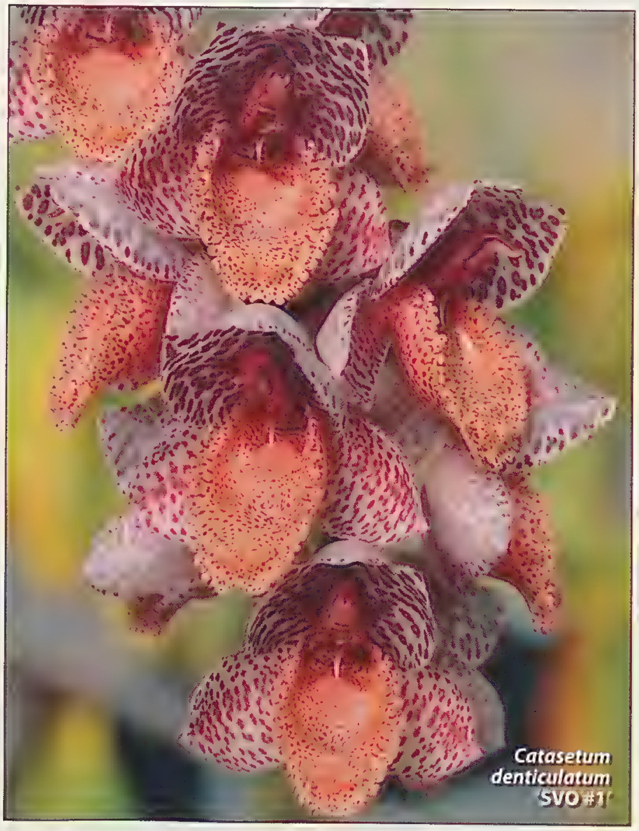
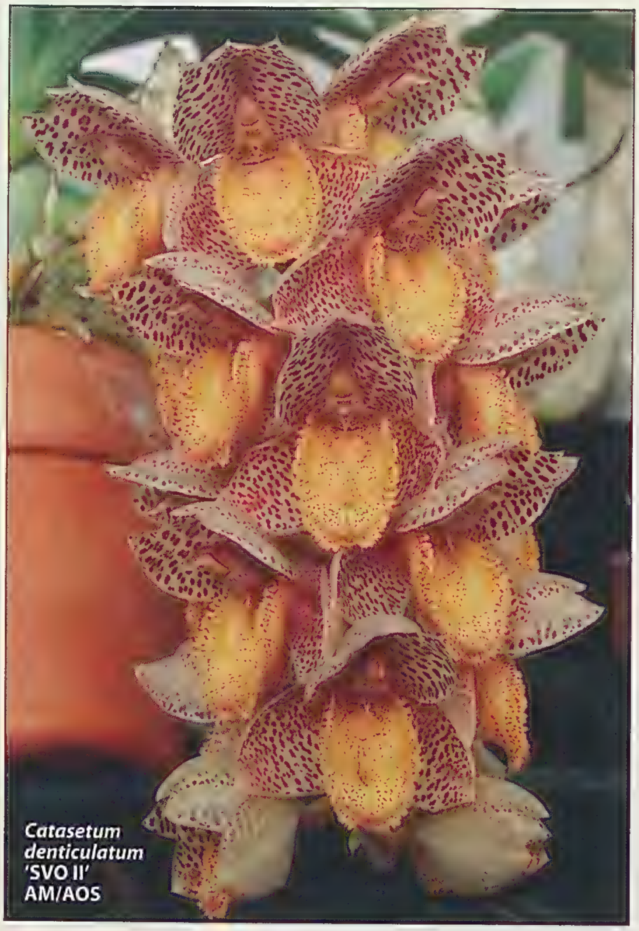
SVO 6005

(*Catasetum denticulatum* 'SVO' AM/AOS x
***Catasetum denticulatum* 'SVO #1')**

This species is rare in Brazil, hard to find in the USA, and in Australia these might be the only ones. This is a small-growing *Catasetum* at 15cm tall. A must have for the discerning collector.



Catasetum denticulatum 'SVO #1'

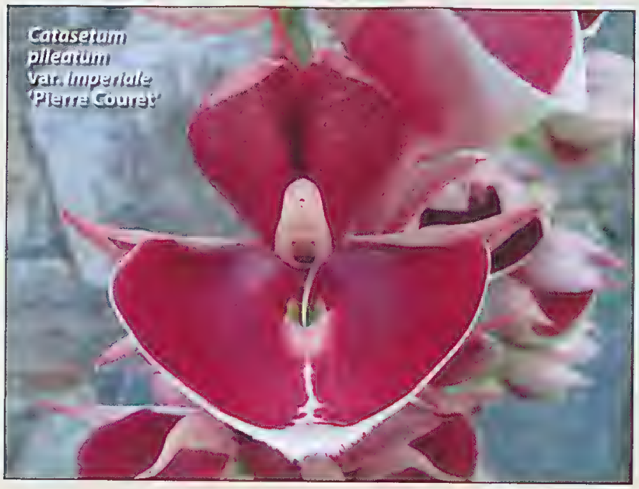


Catasetum denticulatum 'SVO II' AM/AOS

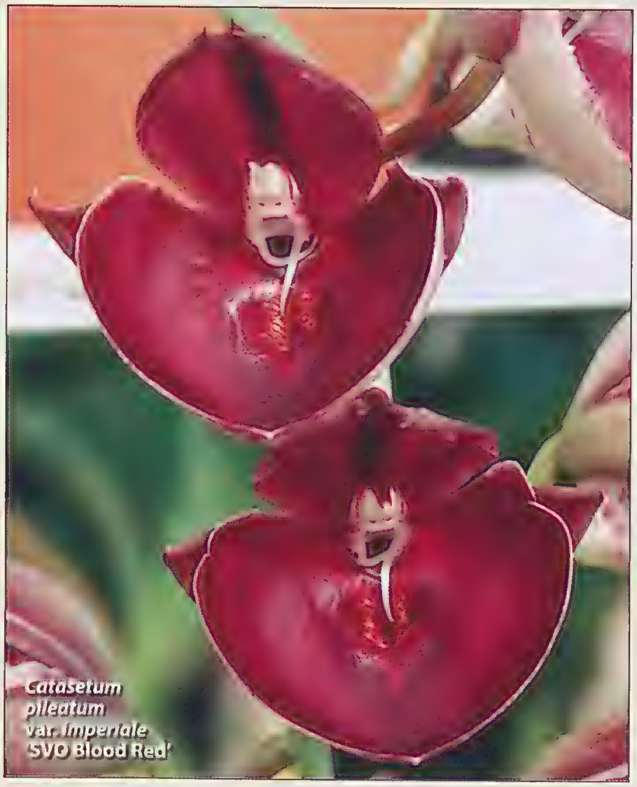
SVO 5985

(*Catasetum pileatum* var. *imperiale* 'Pierre Couret' HCC/AOS x
***Catasetum pileatum* var. *imperiale* 'SVO Blood Red')**

Two very fine and imposing var. *imperiale* forms mated. These will be spectacular, with huge lips and 15 or more flowers, rare in cultivation.



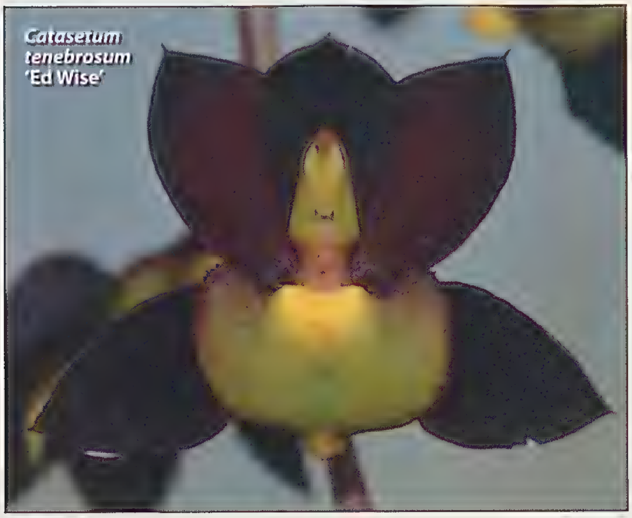
Catasetum pileatum var. *imperiale* 'Pierre Couret'

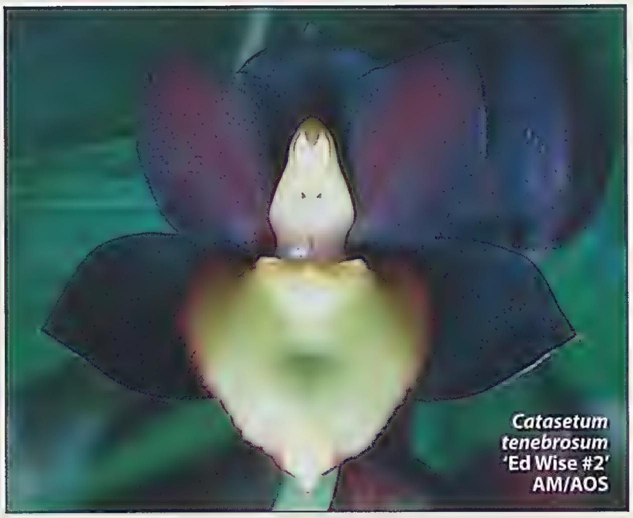


Catasetum pileatum var. *imperiale* 'SVO Blood Red'

SVO 5971
(*Catasetum tenebrosum* 'Ed Wise #2' AM/AOS x *Catasetum tenebrosum* 'Ed Wise')

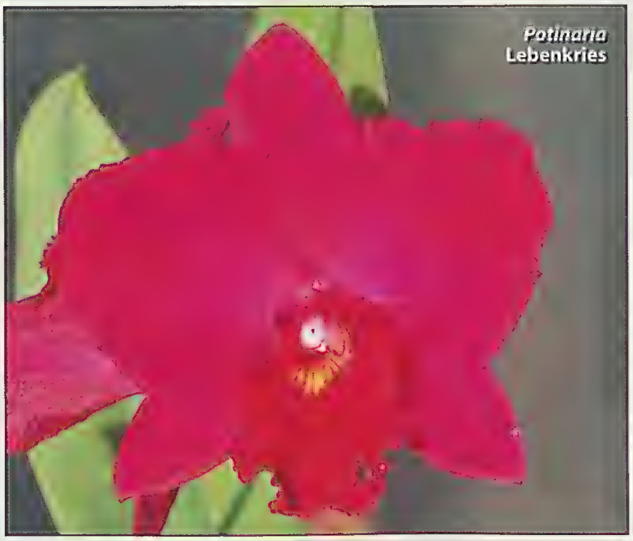
My two best *tenebrosum* ('Ed Wise #2' just received an AM/AOS mid-May 2015) mated together. Outstanding *Catasetum* species, which is the first to bloom each year.





SVO 5678
Potinara Lebenkreis (*Pot.* Rubescence 'SVO' AM/AOS x *Slc.* Circle of Life 'Fordyce Herald Angel' AM/AOS)

New compact-*Cattleya* breeding that will produce 10-13cm, deep red flowers with flat, full shape on plants only 25cm tall. Lots of award potential here.



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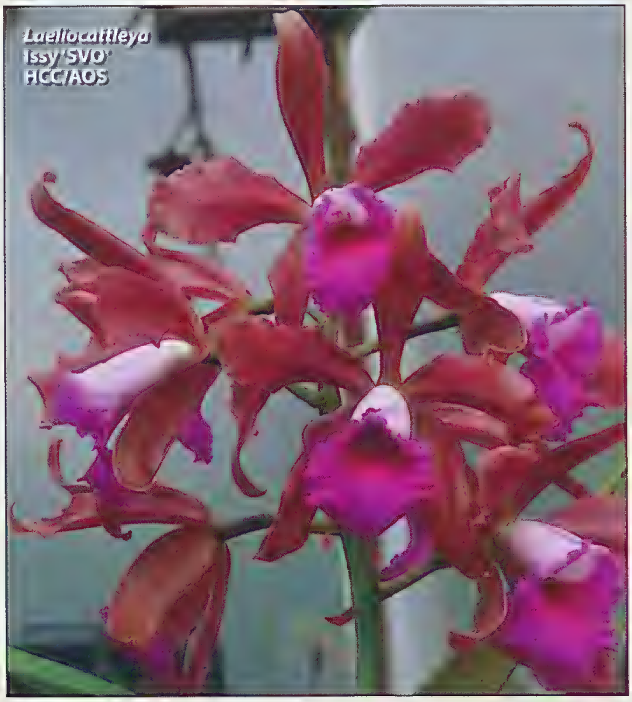
AOR 001

SVO 5589
(Lc. Issy 'SVO' HCC/AOS x *Schomburgkia schultzei* 'Old Sherry' (syn. *Schomburgkia rosea* var. *schultzei*)

A fantastic tall-growing outdoor grower in frost free to subtropical climates. Impressively large heads of deep bronze flowers with dark red lips, on long stems to flower in the summer.


Laeliocattleya Issy 'SVO' HCC/AOS

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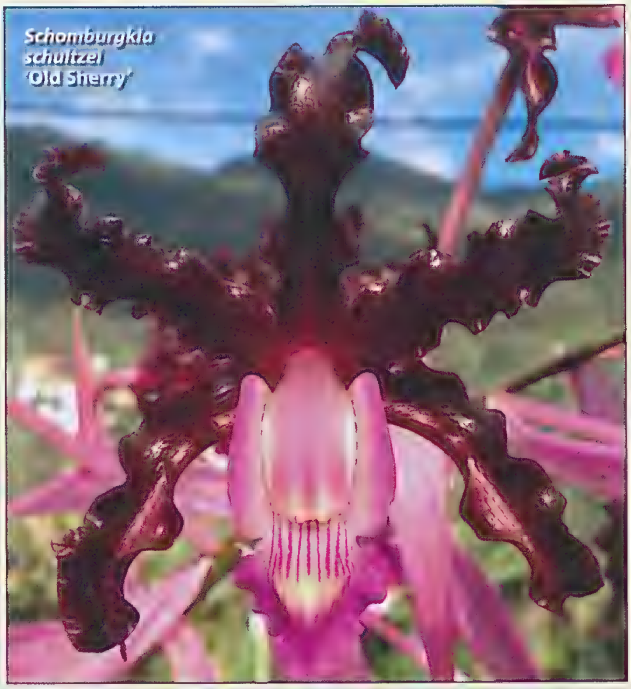
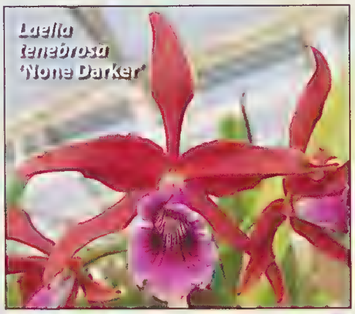

Schomburgkia schultzei 'Old Sherry'

Another bright and easy grower with large blooms would be our remake of the old proven hybrid

***Laelia* Pacavia (*Laelia tenebrosa* 'None Darker' x *Laelia purpurata* var. *atro-purpurea* 'SVO')**


Laelia tenebrosa 'None Darker'

Deep dark bronze/purple flowers and purple/red lips on robust plants that flower in November and December. A great outdoor grower for frost free areas.

Feel free to pre-order flasks, but place any orders early, as I expect them to sell out quickly. ■

Fred Clarke,
Sunset Valley Orchids, CA, USA
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AOR 126

Five New Species of *Speculantha* (Orchidaceae: Pterostylidinae), from eastern Australia

by David L. Jones

Abstract

Speculantha antennifera, Speculantha clivosa, Speculantha crebra, Speculantha exquisita and *Speculantha furva* are described here as new. Notes are included on their distribution, ecology and conservation status; their distinguishing features are compared with those of allied taxa.

Key Words

Orchidaceae, *Speculantha antennifera, Speculantha clivosa, Speculantha crebra, Speculantha exquisita, Speculantha furva,* new species, Australian flora.

Introduction

The characteristics of the segregate genus *Speculantha* have been detailed in two previous publications (Jones & Clements 2002, Jones & Copeland 2014). This paper describes five new species and brings the number of species described from Australia to fifteen. More species await formal recognition.

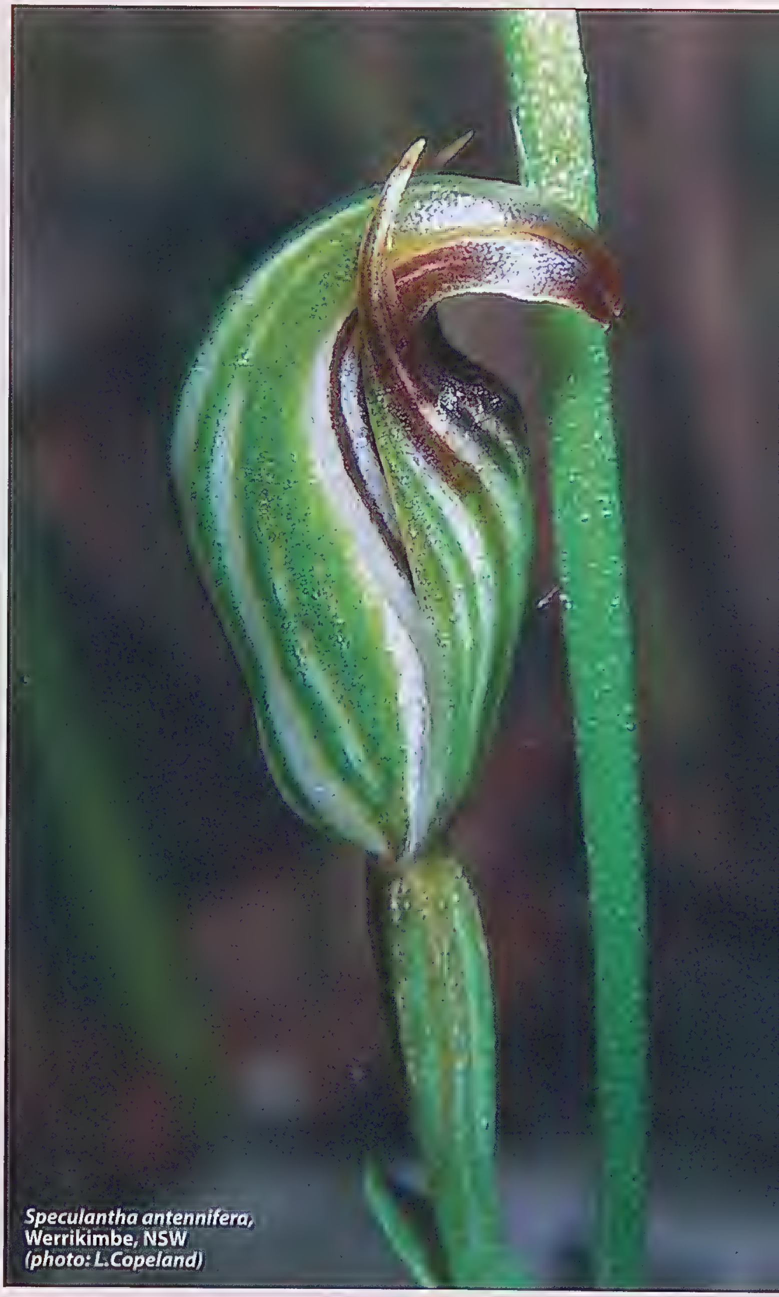
Materials and Methods

Descriptions of the new taxa were made from fresh specimens. Unless otherwise indicated, all types of *Pterostylis* or *Speculantha* relevant to this study (or photographs thereof), and collections cited, have been seen by me.

Taxonomy

1. *Speculantha antennifera* D.L.Jones, ***sp. nov.*** With affinity to *Speculantha parviflora* (R. Br.) D.L.Jones & M.A.Clem., but differing by its larger green, white and brown flowers, a larger narrowly elliptical labellum (oblong in *S. parviflora*) with the tip extending above the sinus opening, sinus frontal opening flat with a shallow medial notch (deeply vee-shaped in *S. parviflora*) and much longer linear to filamentous free points of the lateral sepals which extend well above the top of the galea (triangular and well below the top of the galea in *S. parviflora*).

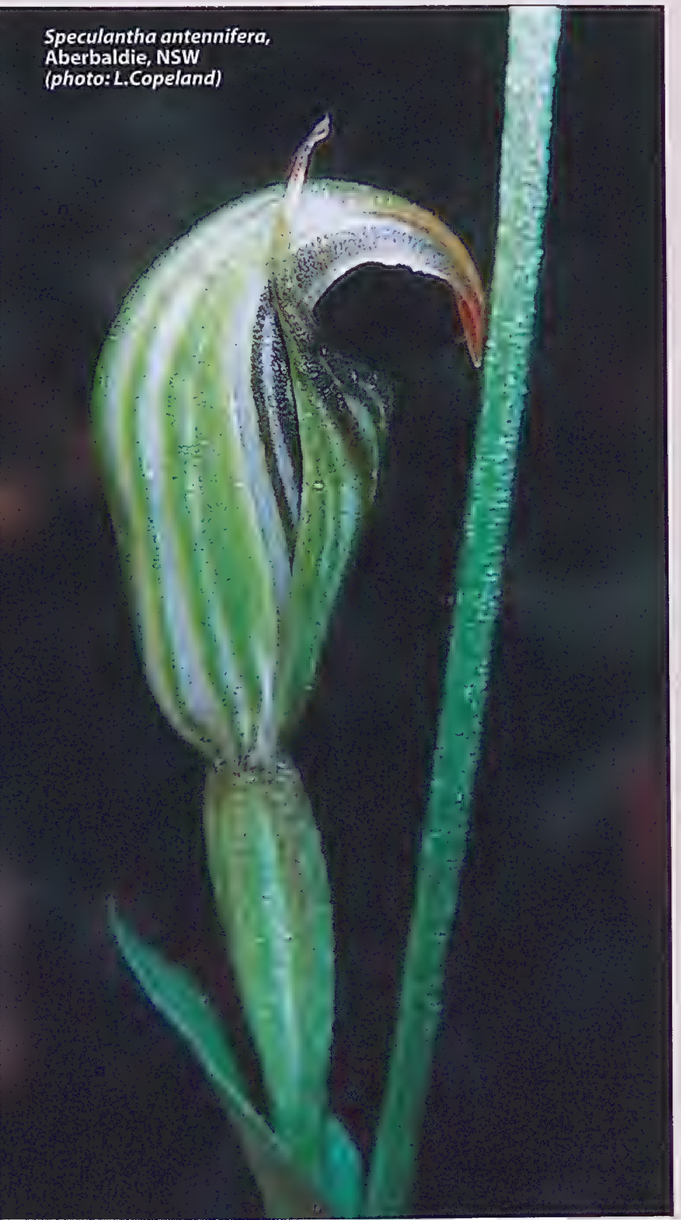
Type: New South Wales. Central Western Slopes: c. 55 km NE of Dubbo on road to Dunedoo, 23 May 1990, *D.L.Jones 6018 & C.Broers* (holo CBG 9010317; iso AD, BRI, K, MEL, NSW).



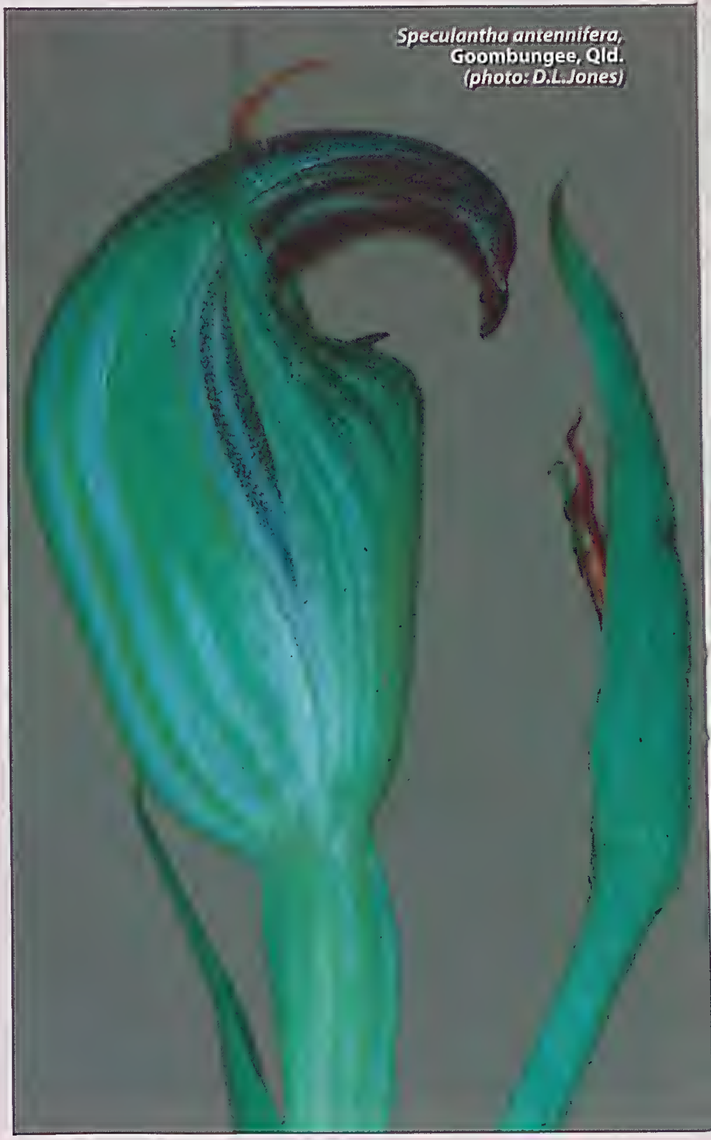
***Speculantha antennifera,* Werrikimbe, NSW (photo: L.Copeland)**

Description: Tuberous, terrestrial *herb. Plants* 12-35 cm tall, not elongating in fruit. *Rosettes* present or absent at flowering, 1-2, basal, arising on a lateral growth. *Leaves* 5-12 per rosette, spreading; *lamina* elliptical to ovate or sagittate, 5-20 mm long, 6-12 mm wide, dull green, margins more or less undulate; apex obtuse to acute; *petioles* slender, 5-15 mm long, narrowly winged. *Scape* slender, wiry, 1-10-flowered. *Sterile bracts* 3-5, closely sheathing; upper bracts spreading and leaf-like, ovate-lanceolate, 6-12 mm long, 3-5 mm wide; margins smooth or crinkled; apex acuminate. *Fertile bracts* closely sheathing, linear-ovate, 5-8 mm long, 2.5-3.5 mm wide, acute. *Flowers* well spaced, facing inwards, 1-2 open at once, externally smooth, 7-9 mm long, 3-3.5 mm wide, green and white striped at the base, flushed with brown towards the apex of the galea; *galea* inflated and curved away from the ovary at the base, then erect before curving forwards in a semi-circle; dorsal sepal about as long as the petals. *Dorsal sepal* ovate-lanceolate when flattened, 12-15 mm long, 5-7 mm wide, inflated at base then tapered distally, boldly striped, smooth (non-scabrous), acute to acuminate. *Lateral sepals* erect, closely embracing the galea; side view flat, bulging at the top and curved sharply inwards; sinus frontal opening flat with a shallow medial notch, 2-2.5 mm wide; conjoined part 5-6 mm long, 4-5 mm wide, narrowed to c. 1 mm across at the base; *free points* erect or curved forwards, 3-4 mm long, margins inrolled with long-acuminate or filiform points, extending high above the galea. *Petals* oblong-lanceolate, 6-7 mm long, 1-1.3 mm wide, strongly falcate, brown with white stripes, dark red brown towards the apex; flange broadly deltate, c. 1 mm across, obtuse. *Labellum* erect, the tip visible above the sinus opening and often protruding through it, curved forwards near the apex, dark red-brown and white. *Labellum lamina* linear-elliptical, 4-4.8 mm long, 1.4-1.6 mm wide, obtuse to bluntly acute; *basal appendage* decurved, c. 1.5 mm long, broadest at base (0.3 mm wide), apex trifid, erect. *Callus* a raised dark brown ridge c. 0.5 mm across. *Column* 6-7 mm long, curved away from the ovary at 50° then erect, green to green-brown. *Column wings* c. 2.5 mm long; basal lobe broadly deltate, c. 1 mm long, brown, at an angle of 50°; apex broadly obtuse; inner margins adorned sparsely with short, white cilia; mid-section c. 1 mm long, brown; apical lobe obliquely erect, narrowly linear, c. 1 mm long. *Anther* c. 1 mm long, obtuse. *Pollinia* linear, c. 1 mm long, yellow, mealy. *Stigma* central, scutiform, c. 2 mm long, c. 1.5 mm wide, raised. *Capsules* erect, ellipsoid, 9-12 mm long, 4-5 mm wide, on pedicels to 9 mm long.

Distribution and ecology: Widely distributed from central-eastern Queensland to central-western areas of New South Wales (more or less between the Blackdown Tableland in Queensland and Dubbo, New South Wales). This species is most prevalent in areas well inland from the coast but has also been recorded from some coastal and near-coastal sites. It grows in a range of forested habitats but most often occurs in woodland among a sparse understorey of shrubs and tussocks. In hilly areas, particularly on the dividing range, the plants grow on slopes and ridges in sparse open forest, or localised in shallow soil on rock outcrops. Alt. 20-650 m alt. Flowering; March to May.



***Speculantha antennifera*, Aberbaldie, NSW (photo: L.Copeland)**



***Speculantha antennifera*, Goombungee, Qld. (photo: D.L.Jones)**

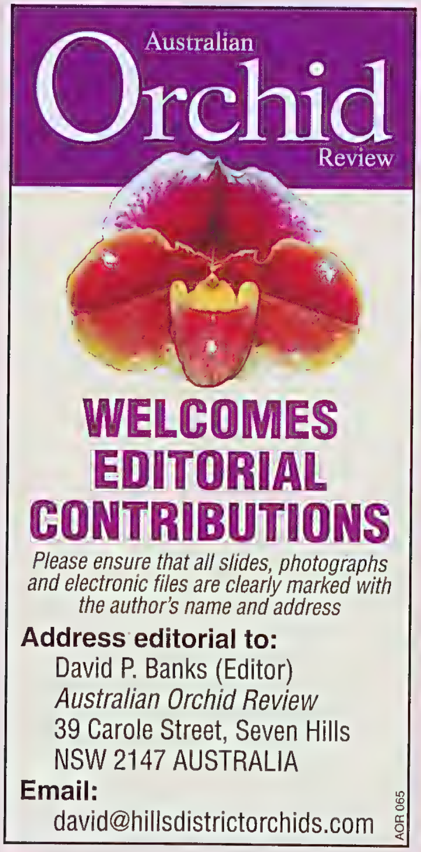
Recognition: Characterised by late summer-winter flowering period; rosettes appearing late in anthesis or after anthesis; dull green rosette leaves (to 20 x 12 mm); tall, wiry scape; closely sheathing sterile bracts; 1-10-flowered inflorescence; flowers widely-spaced, 7-9 mm long, 3-3.5 mm wide, green and white striped at the base, flushed with brown towards the apex; smooth (non-scabrous) dorsal sepal; sinus side view flat, bulging and curved sharply inwards at the top; sinus frontal opening flat with a median notch; free points inrolled, linear to filiform, reaching well above the top of the galea; and, labellum linear-elliptic, dark red-brown and white, the tip visible above the sinus opening in the set position.

Similar species: *Speculantha antennifera* shares some significant features with *S. parviflora* including green, white and brown flowers which are smooth (non scabrous) externally and the labellum tip visible above the sinus opening in the set position. *Speculantha parviflora* however, can be distinguished by its smaller flowers, a deeply vee-notched frontal opening on the sinus, an oblong labellum and short triangular free points on the lateral sepals which end well below the top of the galea.

Conservation status: The new species is widespread, locally common and well conserved.

Etymology: From the Latin *antenna,* feeler, sensory appendage, and *–fer, -fera,* bearing, referring to the slender antenna-like free points on the lateral sepals.

Other specimens: QUEENSLAND: The Tombs, c. 110 km NW of Injune, 16 June 1977, *M.D.Crisp 3111 & R.K.Ellyard* (BRI, CANB); Blackdown Tableland, 18 Apr. 1971, *R.J.Henderson 632 & P.Sharpe* (BRI); Noosa Heads, May 1952, *T.E.Hunt 530* (BRI, MEL); NEW SOUTH WALES: The Valley, Hornsby, Apr. 1914, *W.Blakely* (NSW); Guntawang, no date, *R.Collie* (NSW); Hillview, 2.5 miles SW of Liverpool, 19 Apr. 1969, *R.Coveny 1023* (NSW); Rockdale, May 1887, *H.Deane* (NSW); Lady Robinsons Beach, Apr. 1887, *J.Fletcher* (NSW); Kanimbla Valley, Apr. 1977, *B.Johnson* (NSW); Woodford, 28 Mar. 1956, *B.B.Lowery* (QRS); Pilliga Scrub (in fruit), 30 Aug. 1975, *P.Metcalfe* (NSW); Katoomba (in fruit), 14 Sept. 1910, *R.S.Rogers* (AD); Mount York (in fruit), 10 Sept. 1917, *R.S.Rogers* (AD); Capertee, Apr. 1917, *H.M.R.Rupp* (AD, NSW); Lane Cove, June 1917, *H.M.Rupp* (NSW); Terreys Creek, Epping, 24 June 1948, *Schmidt* (NSW); Lane Cove, De Burghs Bridge, 15 Apr. 1949, *Schmidt* (NSW); 6 km WNW of Mittagong, 1 Apr. 1972, *J.Thompson 1519* (NSW).



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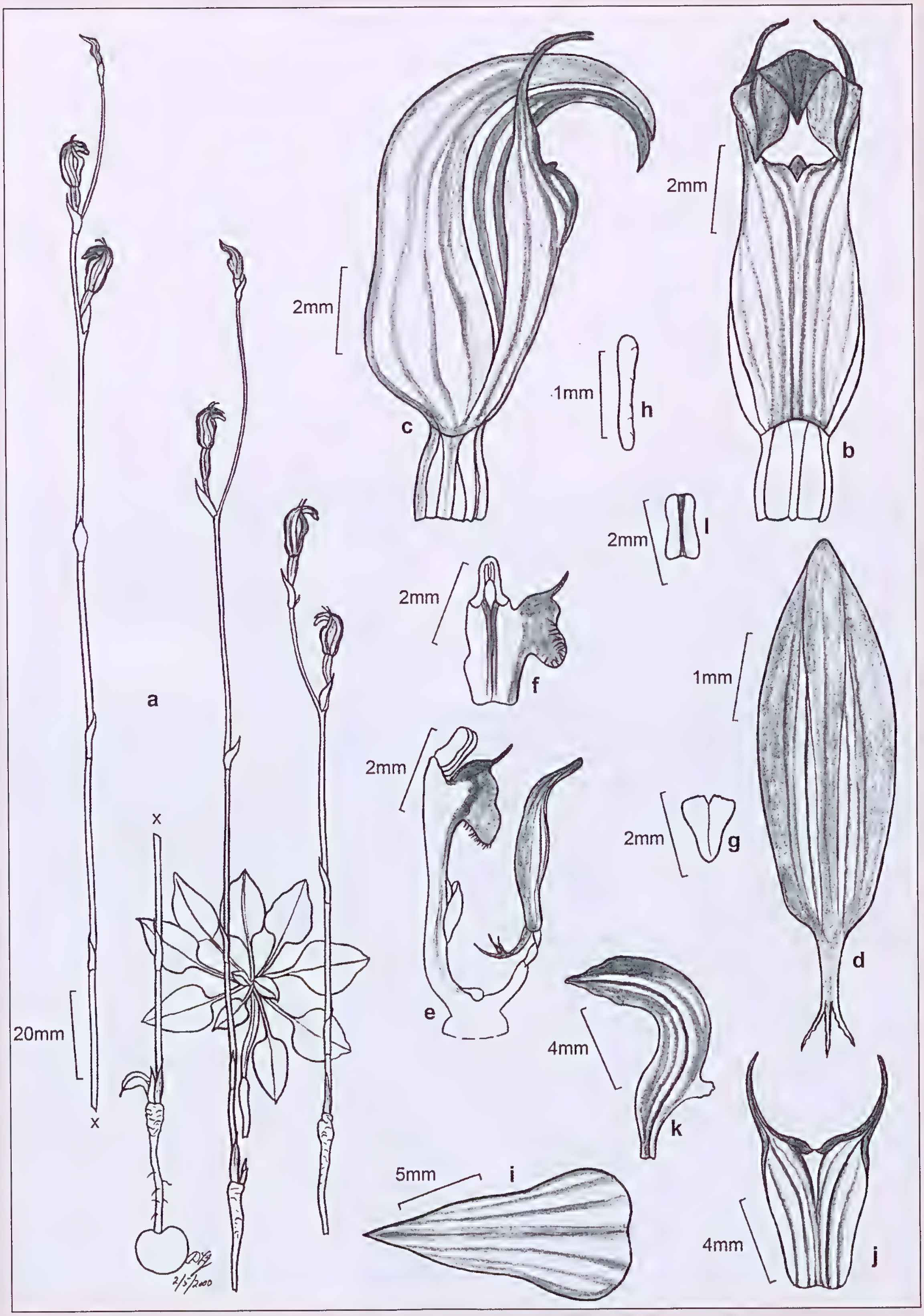


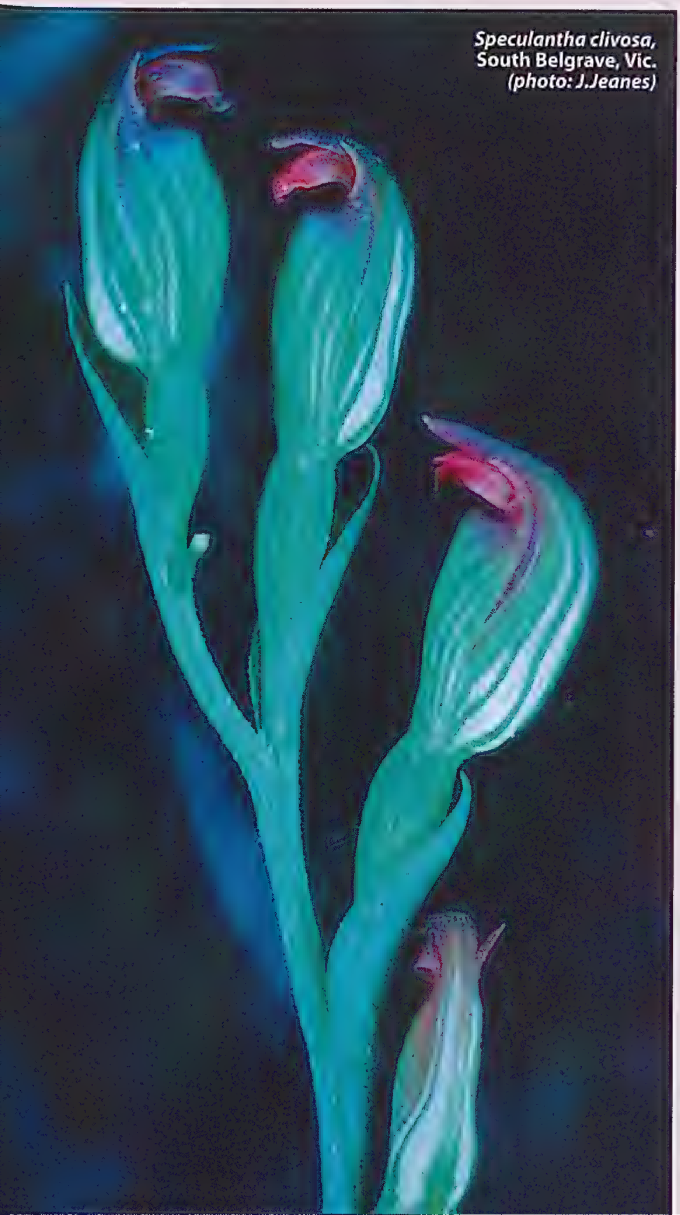
Speculantha antennifera*, Mt Moffat, Queensland, *R.Crane 1668
a. flowering plants and rosette; b. flower from front; c. flower from side; d. labellum; e. column and labellum from side; f. top of column from front; g. stigma; h. pollinium; i. dorsal sepal; j. synsepalum; k. petal; l. labellum hinge. © **D.L.Jones, 2 May 2000**

2. *Speculantha clivosa* D.L.Jones, ***sp. nov.*** With affinity to *Speculantha parviflora* (R.Br.) D.L.Jones & M.A.Clem., but differing by its taller habit, broader and more crowded flowers, scabrous dorsal sepal (smooth in *S. parviflora*), sinus sharply stepped inwards when viewed from the side, from the front flat with a shallow central notch (deeply vee-shaped in *S. parviflora*), and the labellum not visible from the exterior in any position (the tip visible in the set position in *S. parviflora*).

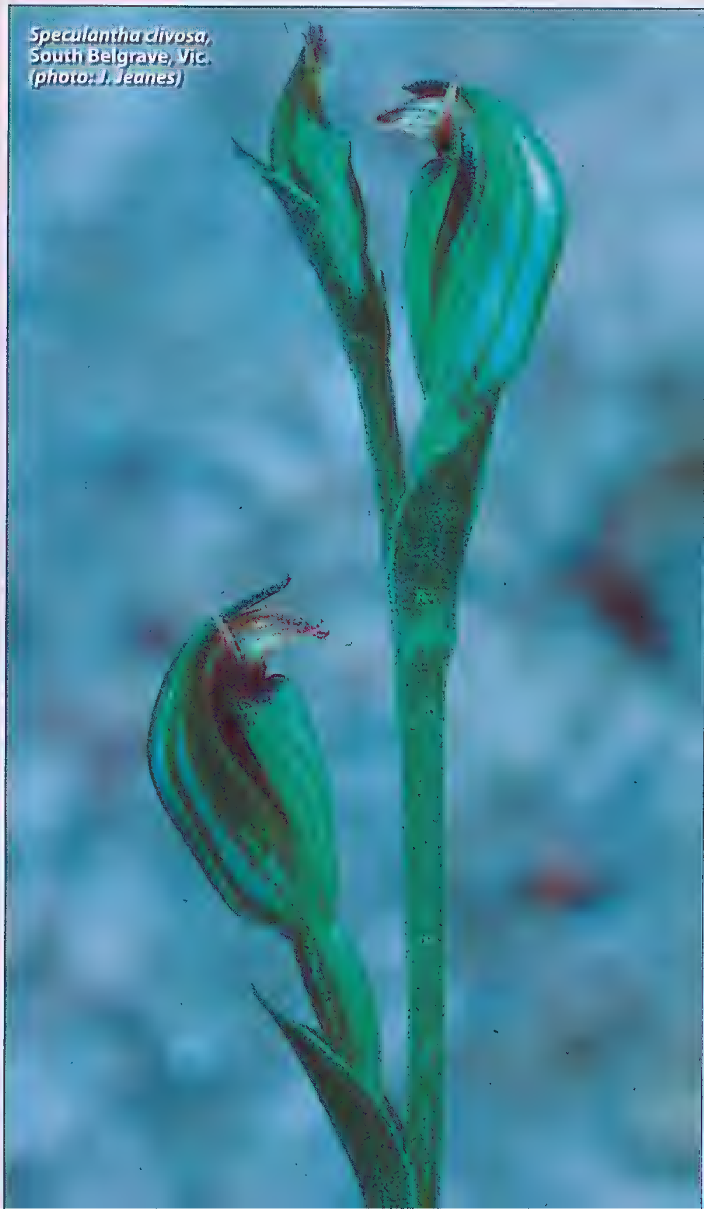
Type: Victoria. Courtney's Road, Mt Morton, c. 5 km from Wellington Road intersection, 16 May 1987, *D.L.Jones 2549* (holo CBG 8806227; iso MEL, NSW).

Illustrations: Plate 244, Bishop (1996), as. *Pterostylis* sp. aff. *parviflora* (Eastern Melbourne); bottom plates, page 120, Jeanes & Backhouse (2001).

Description: Glabrous, tuberous, terrestrial *herb*. *Plants* 10-40 cm tall, not elongating in fruit. *Rosettes* 1-2, absent or just developing at anthesis, borne on lateral growths from the base of the scape. *Leaves* 3-8 per rosette, spreading; *lamina* ovate to elliptical-ovate, 5-11 mm long, 3-7 mm wide, dull green; margins entire; apex acute. *Scape* slender, wiry, 1-12-flowered. *Sterile bracts* 2-5; basal bracts closely sheathing; upper bracts spreading and leaf-like. *Fertile bracts* closely sheathing, linear-ovate, 6-10 mm long, 2.5-3.5 mm wide, acute. *Flowers* moderately crowded, 1-4 open at once, 7-9 mm long, 3-3.5 mm wide, base green and white, bright red-brown towards the apex, especially the petals; dorsal sepal and petals of similar length, the distal part of the dorsal sepal scabrous. *Dorsal sepal* ovate-lanceolate when flattened, 9-12 mm long, 4-5 mm wide, inflated at the base then tapered to the apex, not boldly striped, acute to subacute. *Lateral sepals* erect, closely embracing the galea; side view flat, bulging and curved sharply inwards at the top; sinus frontal opening c. 3 mm wide, flat with a shallow central notch; conjoined part 5-6 mm long, 4-5 mm wide, narrowed to c. 1.6 mm across at the base; free points erect or curved forwards, 2-2.5 mm long, triangular-tapered, acuminate, not reaching to the top of the galea. *Petals* oblong-lanceolate, 8-9 mm long, c. 2.3 mm wide, strongly falcate, brown with white stripes. *Labellum* erect, not visible through the sinus in any position, slightly curved forwards near the apex, red to red-brown and white. *Labellum lamina* broadly elliptical to ovate-elliptical, 3-3.5 mm long, 1.2-1.4 mm wide, obtuse; basal appendage decurved, c. 1 mm long, broadest at the base (0.25 mm wide); apex trifid, erect. *Callus* a raised central red to red-brown ridge c. 0.4 mm across. *Column* 5-6 mm long, curved away from the ovary at 60° at the base then erect, green to brown. *Column wings* c. 1.5 mm long; basal lobe broadly deltate, c. 0.7 mm long, c. 0.6 mm wide, brown, at an angle of 50°; apex broadly obtuse; inner margins adorned sparsely with short, white cilia; mid-section c. 1.3 mm long, brown; apical lobe obliquely erect, linear, c. 0.8 mm long, often curved. *Anther* c. 1.3 mm long, obtuse. *Pollinia* linear, c. 1.3 mm long, yellow, mealy. *Stigma* situated below the centre, scutiform, c. 1.5 mm long, c. 1 mm wide, raised. *Capsules* erect, narrowly ovoid to ellipsoid, 7-9 mm long, 3-4 mm wide, strongly ribbed.



***Speculantha clivosa*, South Belgrave, Vic. (photo: J.Jeanes)**



***Speculantha clivosa*, South Belgrave, Vic. (photo: J. Jeanes)**

Distribution and ecology: Occurs in hilly areas to the east, west and immediate north of Melbourne, Victoria, more or less between the Yarra Valley and the Otways, north to near Ballan, with a disjunct easterly extension in the hills north of Morwell. The species was once common in several eastern Melbourne suburbs between Ringwood and South Belgrave, with many or most of these localities now lost. It grows on ridges and slopes dominated by *Eucalyptus obliqua* and *E. goniocalyx* among a dense shrubby understorey. The orchid plants often grow in open sites between shrubs and also colonise tracks and road verges. Flowering appears to be stimulated by fire, certainly a response occurs in the second and third years after a burn. Soils are shallow grey clay loams which can be seasonally wet. Alt. 50-300 m. Flowering: April to June.

Recognition: Characterised by autumn-winter flowering period; rosettes appearing late in anthesis or after anthesis; dull green rosette leaves (to 11 x 7 mm); tall, wiry scape; sheathing sterile bracts; 1-12-flowered inflorescence; moderately crowded, plump flowers, 7-9 x 3-3.5 mm, green and white at base, bright red-brown towards the apex, especially the petals; scabrous dorsal sepal; sinus sharply stepped inwards, shallowly vee-ed when viewed from the front, the area below shallowly sloping when viewed from the side; tapered free points that don't reach the top of the galea; and, a red-brown and white, broadly elliptical to ovate-elliptical labellum, 3-3.5 x 1.2-1.4 mm, the tip not visible from the exterior in any position.

Similar species: *Speculantha clivosa* has been confused with *S. parviflora* which is less robust with much narrower, greener flowers (some brown in the apex of the flower), a deeply vee-notched sinus with the labellum tip visible in the set position and a smooth (non-scabrous) dorsal sepal. Its closest congener appears to be an undescribed species from East Gippsland which flowers earlier and has larger, plumper flowers that are brown to dark brown throughout, the area below the sinus bulging prominently and a broader labellum.

Notes: I have provisionally included in this taxon, specimens collected from suburbs in the sand belt south of Melbourne (Beaumaris, Cheltenham, Frankston) and near Anglesea to the south-west of Melbourne, but these may require further study. Unfortunately the populations in the southern Melbourne suburbs are now greatly reduced or extinct making the study of fresh material difficult.

Conservation status: Of restricted distribution and with much of its habitat alienated by urbanisation; suggest 2E by the criteria of Briggs & Leigh (1996).

Etymology: The Latin *clivosus*, hilly, in reference to the hilly habitat apparently preferred by this species.

Other specimens: VICTORIA: 18 km SSW of Ballan P.O., 29 Mar. 1982, *A.C.Beauglehole 20526* (MEL); Gerangamete area, 19 km SSE of Colac P.O., 22 Apr. 1979, *A.C.Beauglehole 63873* (MEL); Murrumbeena, 21 June 1921, *A.B.Braine* (AD); Ringwood, 8 May 1922, *E.Coleman* (AD); Otways Region, McKenzie Track, 18 May 1983, *G.E.Earl 236 & D.M.Parkes* (MEL); Otways Region, Cricket Pitch Track, 5 June 1983, *G.E.Earl 286 & D.M.Parkes* (MEL); Courtney's Road, Mt Morton, 25 May 2000, *D.L.Jones 17197, B.E.Jones & J.A.Jeanes* (CANB); Upper Yarra MMBW Catchment, 31 Mar. 1979, *A.Morton & N.Walsh* (MEL); Lockwood, Apr. 1926 & 1927, *W.H.Nicholls* (MEL); Marysville, 12 Feb. 1937, *W.H.Nicholls* (MEL); Boola Boola State Forest, N of Morwell, June 1976, *J.Piggin* (CANB); Bayswater, 30 Apr. 1912, *R.S.Rogers* (AD); Frankston, 1 May 1912, *R.S.Rogers* (AD); Cheltenham, no date, *no collector* (AD).

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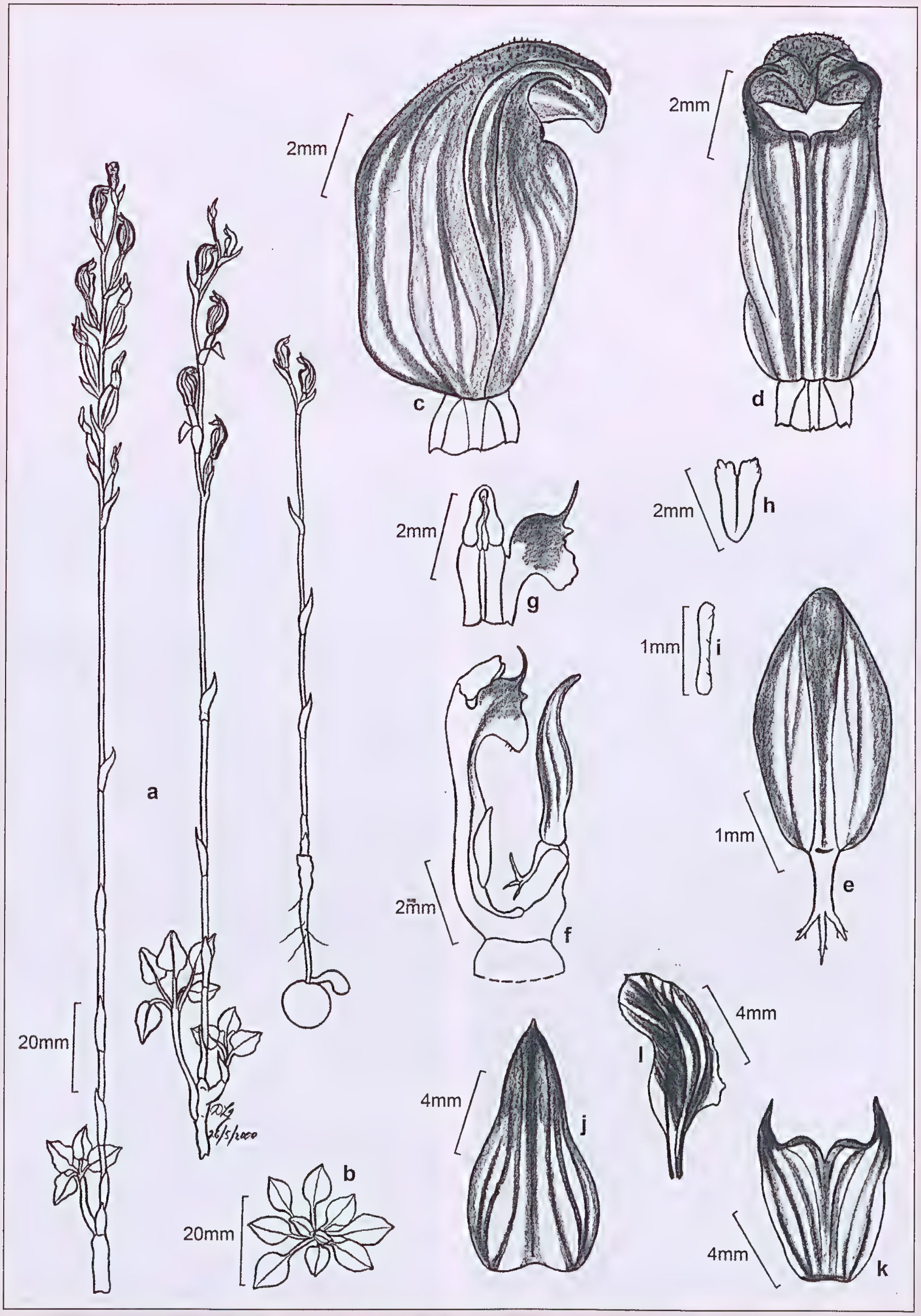


Speculantha clivosa*, Mt Morton, Vic, *D.L.Jones 17197
a. flowering plants with basal rosettes; b. single rosette; c. flower from side; d. flower from front; e. labellum; f. column and labellum from side; g. top of column from front; h. stigma; i. pollinium; j. dorsal sepal; k. synsepalum; l. petal. © **D.L.Jones, 26 May 2000**

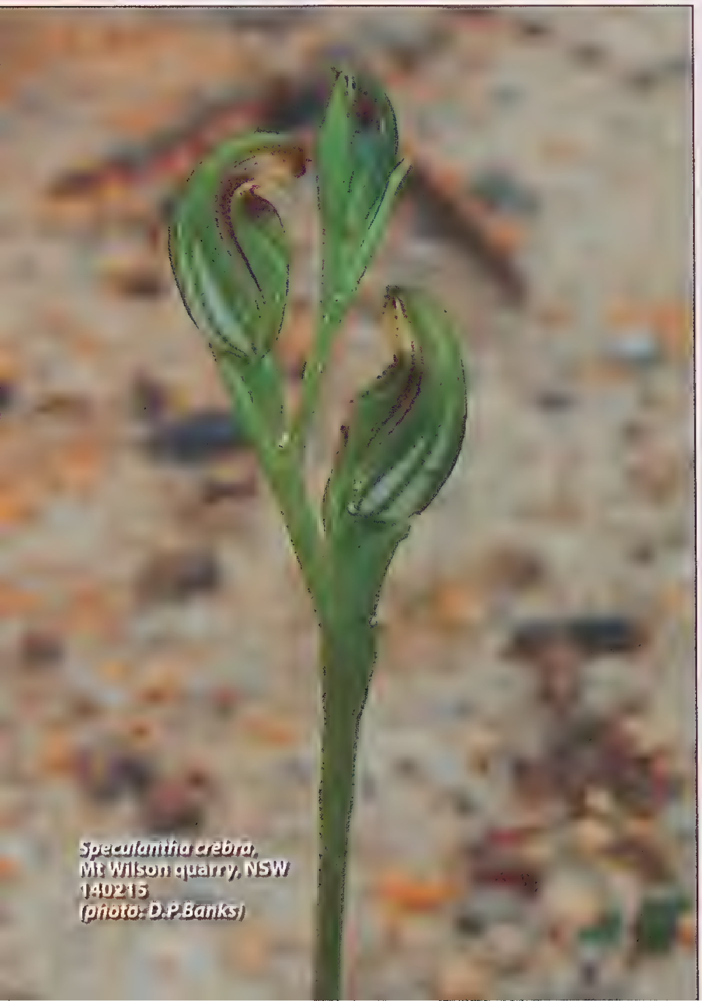
3. *Speculantha crebra* D.L.Jones, ***sp. nov.*** With affinity to *Speculantha parviflora* (R.Br.) D.L.Jones & M.A.Clem., but differing by its bluish-green rosette leaves, short thick scape, much broader, crowded flowers in which the labellum is not visible from the exterior in any position (in *S. parviflora* the labellum is visible from the exterior in the set position), sinus frontal opening sloping gently with a shallow central notch (deeply vee-notched in *S. parviflora*) and a narrowly elliptical, strongly striped labellum (oblong and faintly striped in *S. parviflora*).

Type: New South Wales. Vicinity of Mt. Wilson turn-off from Bell-Windsor Rd., 25 January 1989, *D.L.Jones 3490 & G.Savage* (holo CBG 8901346).

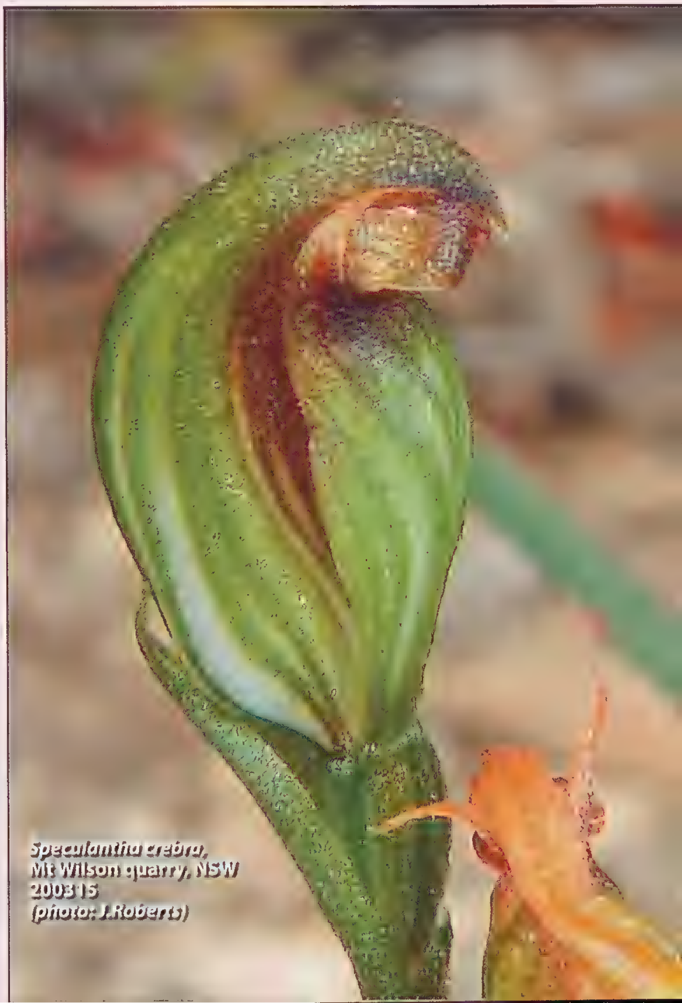
Illustration: Plate 241, Bishop (1996), as. *Pterostylis* sp. aff. *parviflora* (Dwarf Crowded).

Description: Tuberous, terrestrial *herb*. *Plants* 5-20 cm tall, not elongating in fruit. *Rosette* usually absent at anthesis, arising after anthesis on a lateral growth from the base of the scape. *Rosette leaves* 3-5, spreading; lamina ovate, 8-12 mm long, 7-9 mm wide, bluish green; margins entire; apex acuminate; petioles 3-5 mm long, slender, narrowly winged. *Scape* 1-10-flowered. *Sterile bracts* 3-5, closely sheathing, narrowly ovate, 7-13 mm long, 3-4 mm wide, acuminate. *Fertile bracts* ovate, 4-7 mm long, 3-4 mm wide, acuminate. *Flowers* crowded, facing inwards, 1-6 open at once, 9-10 mm long, c. 4 mm wide, brown, green and white, prominently striped, shiny; *galea* inflated, curved away from the ovary at the base, erect before curving forwards in a semi-circle; dorsal sepal about as long as the petals, the distal parts of the dorsal sepal scabrous. *Dorsal sepal* ovate-lanceolate when flattened, 13-15 mm long, 6-8 mm wide, inflated at the base then gradually tapered, boldly striped, acute, dorsal surface scabrous. *Lateral sepals* erect, closely embracing the galea; side view curved to bulging, shortly stepped in at the top; sinus frontal opening sloping gently with a shallow central notch (difficult to see from the front due to incurved petals), c. 4 mm wide; conjoined part 6-7 mm long, 4-5 mm wide, narrowed to c. 2 mm across at the base; free points erect or curved forwards, c. 2 mm long, triangular, sharply tapered, the tips not reaching the top of the galea. *Petals* oblong-lanceolate, 8-10 mm long, 2-2.5 mm wide, strongly falcate, dark brown striped with white, subacute; flange c. 1 mm across, broadly deltate, obtuse. *Labellum* erect, not visible through sinus in any position, slightly curved forwards near the apex, dark red-brown and white, strongly striped. *Labellum lamina* narrowly elliptical, 3.5-4 mm long, 1.2-1.5 mm wide, obtuse; basal appendage decurved, c. 1 mm long, broadest at base (0.35 mm wide); apex trifid. *Callus* a raised, central, reddish-brown ridge c. 0.3 mm across. *Column* 6-6.5 mm long, curved away from the ovary at 50° then erect, brown. *Column wings* c. 2.3 mm long; basal lobe broadly deltate, c. 0.8 mm long, c. 0.6 mm, white, at an angle of 50°; apex obtuse; inner margins adorned sparsely with short, white cilia; mid-section c. 1 mm long, brown; apical lobe erect, linear, c. 1.2 mm long. *Anther* c. 1 mm long, obtuse. *Pollinia* linear to linear-clavate, c. 1.3 mm long, pale yellow, mealy, incoherent. *Stigma* central to slightly basal, scutiform, c. 2 mm long, c. 1.5 mm wide, raised. *Capsules* erect, ellipsoid, 10-12 mm long, 3-4 mm wide.

Distribution and ecology: The Blue Mountains of central New South Wales, where found on the higher peaks, mainly between Mt Wilson and Blackheath; also in Kanangra Boyd National Park. Generally widespread and locally common within this distribution. The orchid plants mainly grow on ridges and slopes among sparse, low shrubs and herbs on or close to outcrops of sandstone; less commonly among sedges around the margins of seepage areas. Soils are light brown sandy loams frequently containing a significant proportion of small stones or laterite gravel. Alt. 650-1050 m. Flowering: January to April.



Speculantha crebra,
Mt Wilson quarry, NSW
140215
(photo: D.P.Banks)



Speculantha crebra,
Mt Wilson quarry, NSW
200315
(photo: J.Roberts)

Recognition: Characterised by summer-autumn flowering period; rosettes appearing late in anthesis or after anthesis; bluish-green rosette leaves (to 12 x 9 mm); short, thick scape; sheathing sterile bracts; 1-10-flowered inflorescence; crowded, plump flowers, 9-10 x c. 4 mm, brown, green and white, prominently striped, shiny; scabrous dorsal sepal; sinus shortly stepped inwards, flat with a shallow median notch when viewed from the front, the area below bulging when viewed from the side; tapered free points that don't reach the top of the galea; and, a dark red-brown and white, oblong to oblong-ovate labellum, 3.5-4 x 1.2-1.5 mm, the tip not visible from the exterior in any position.

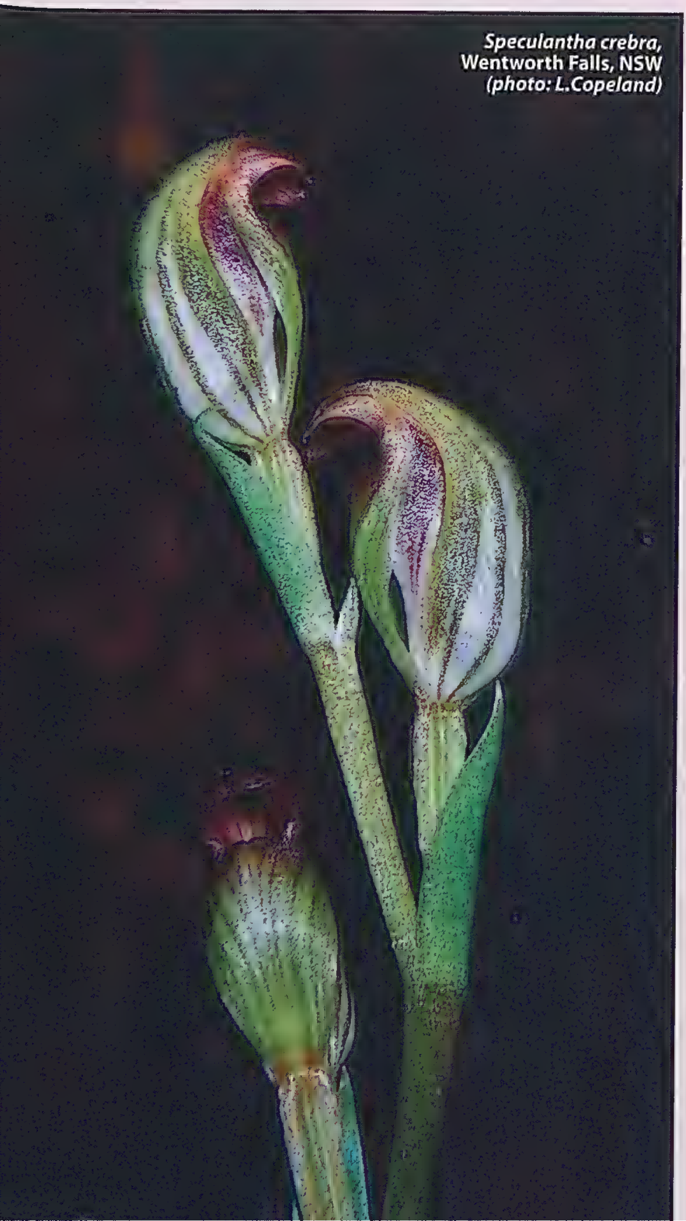
Similar species: The affinities of *Speculantha crebra* are unclear. It is readily distinguished within the genus by its short thickish scape and crowded, dumpy flowers.

Notes: *Speculantha crebra* and *S. parviflora* grow and flower sympatrically in parts of the Blue Mountains but hybrids are unknown.

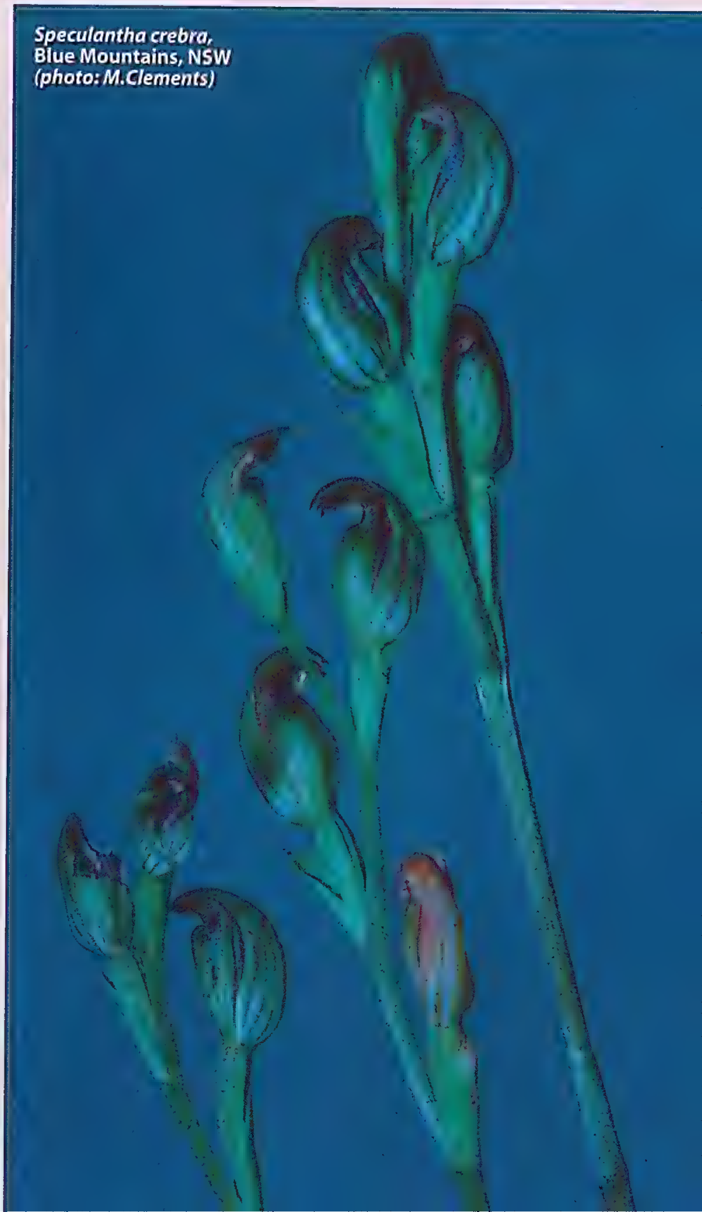
Conservation status: Relatively widespread, locally common and well conserved.

Etymology: From the Latin *creber*, crowded, close, pressed together, in reference to the crowded flowers.

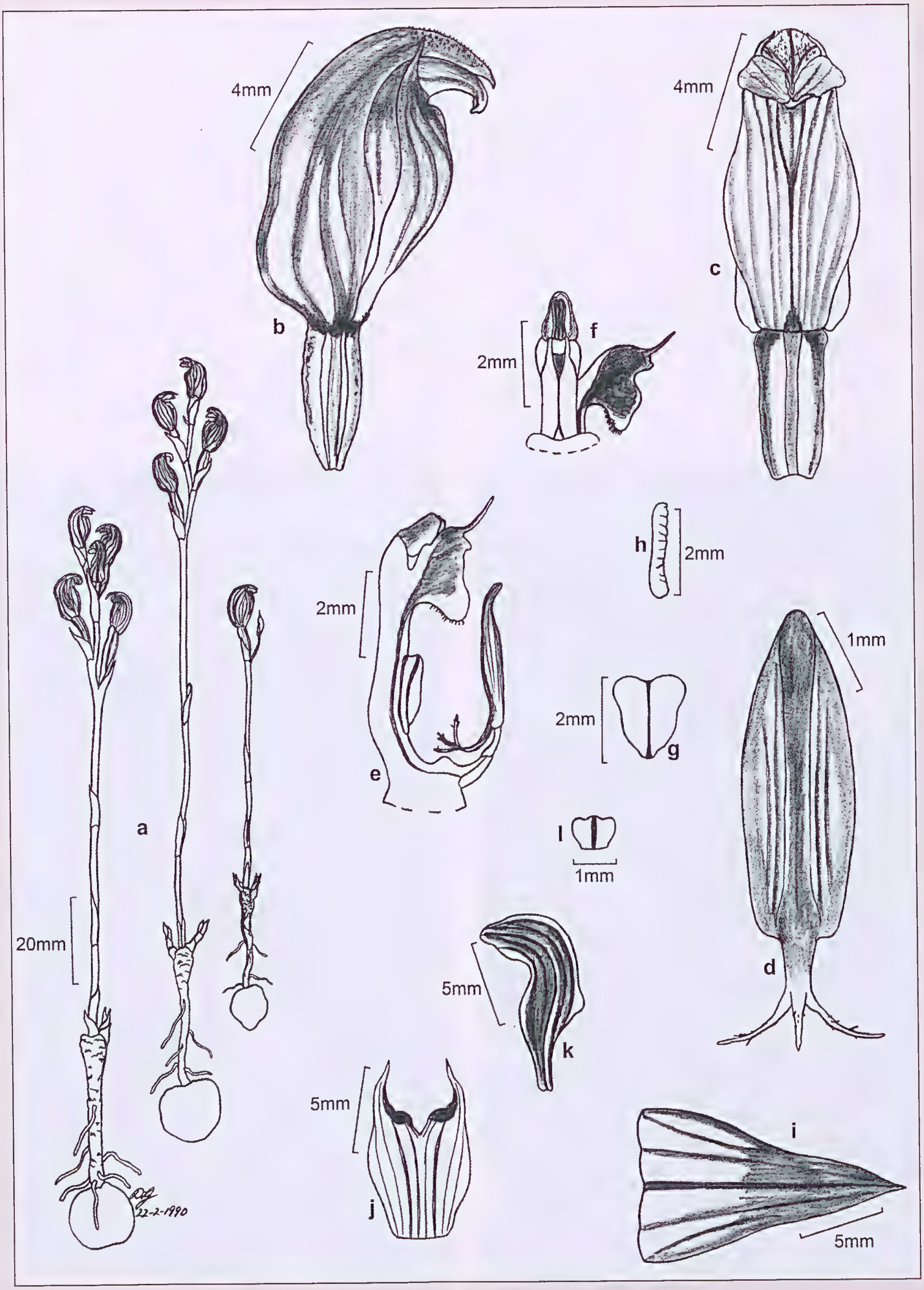
Other specimens: NEW SOUTH WALES: Oberon-Kanangra Walls Road, 5 Mar. 1990, *A.D.Bishop 104/13-18* (CANB); Woodford, 27 Feb. 1970, *I.Bowden* (NSW); Mt Wilson, 16 Feb. 1986, *M.A.Clements 3966* (CANB); c. 4 km along Mt Wilson Road from Bells Line of Road, 7 Feb. 1988, *D.L.Jones 2502* (CANB); Narrowneck, 24 Jan. 1989, *D.L.Jones 3479 & G.Savage* (CANB); c. 3 km E of Bell, 25 Jan. 1989, *D.L.Jones 3488* (CANB); track beside Railway Line, Blackheath, 16 Feb. 1990, *D.L.Jones 5649 & B.E.Jones* (CANB); Mt Irvine, 17 Feb. 1990, *D.L.Jones 5669 & B.E.Jones* (CANB); Mt Wilson Road, 12 Feb. 1993, *D.L.Jones 11305* (CANB); Mt Wilson turnoff, Bells Line of Road, 21 Feb. 2000, *K.J.Fitzgerald (ORG 2940)* (CANB); Mt Victoria, Apr. 1906, *J.H.Maiden* (NSW); Mount Irvine, Feb. 1942, *J.&G.Scrivener* (NSW); Clarence, 10 Feb. 1968, *B.Whitehead* (CANB); Mt Charles, 16 Mar. 1969, *B.Whitehead (ORG 4896b)* (CANB).



Speculantha crebra*, Wentworth Falls, NSW *(photo: L.Copeland)



Speculantha crebra*, Blue Mountains, NSW *(photo: M.Clements)



***Speculantha crebra*, Mt Wilson turnoff, Blue Mtns, NSW**
a. flowering plants; b. flower from side; c. flower from front; d. labellum; e. column and labellum from side; f. top of column from front; g. stigma; h. pollinium; i. dorsal sepal; j. synsepalum; k. petal; l. labellum hinge. © **D.L.Jones, 22 Feb. 1990**

4. *Speculantha exquisita* D.L.Jones, ***sp. nov.*** With affinity to *Speculantha parviflora* (R.Br.) D.L.Jones & M.A.Clem., but differing by its darker flowers which are bright pinkish-red at the apex, the dorsal sepal densely scabrous (smooth in *S. parviflora*), the top of the sinus sharply stepped inwards from the side, sinus frontal opening flat with a shallow medial notch (deeply vee-notched in *S. parviflora*), and the elliptical labellum not visible from the exterior in any position (oblong labellum in *S. parviflora* and visible in the set position).

Type: Queensland. Mt Mee State Forest, 9 April 1995, *R.Crane 1085* (holo CBG 9608225).

Description: Glabrous, tuberous, terrestrial *herb*. *Plants* 12-20 cm tall, not elongating in fruit. *Rosettes* absent at anthesis, usually 1, arising on a lateral growth from the base of the scape. *Rosette leaves* 3-7 per rosette; lamina ovate, 5-16 mm long, 3-12 mm wide, dull green; margins entire; apex acute to apiculate; petioles 5-10 mm long, slender, narrowly winged. *Scape* 1-5-flowered. *Sterile bracts* spreading and somewhat leaf-like, 3-7, ovate-lanceolate, 7-15 mm long, 3-5 mm wide, acuminate. *Fertile bracts* closely sheathing, ovate, 6-10 mm long, 3-4.5 mm wide, acuminate. *Flowers* widely spaced, 1-2 open at once, 7.5-9 mm long, 3-3.5 mm wide, green and white at the base, rest bright reddish brown and white, red towards the apex; dorsal sepal and petals of similar length. *Dorsal sepal* ovate-lanceolate when flattened, 10-12 mm long, 4.5-5.5 mm wide, inflated at the base then tapered to apex, very boldly striped, acute to apiculate, strongly scabrous over most of the distal dorsal surface. *Lateral sepals* erect or curved forwards; side view curved, stepped suddenly inwards; sinus frontal opening flat with a medial notch, 4-4.5 mm wide, narrowed to 2 mm wide at the base; free points erect, c. 2 mm long, triangular-tapered, acuminate, just reaching to the top of the galea. *Petals* ovate-oblong, 8-10 mm long, 2-2.5 mm wide, strongly falcate, bright red brown with narrow white stripes, acute to acuminate; flange c. 1 mm across, broadly deltate, erose to crenate. *Labellum* erect, not visible through sinus in any position, slightly curved forwards near the apex, pale red and white. *Labellum lamina* elliptical, 3-3.5 mm long, c. 1.5 mm wide, obtuse or emarginate; basal appendage decurved, c. 1.2 mm long, broadest at the base (0.5 mm wide); apex trifid, erect. *Callus* a raised central pale red ridge c. 0.3 mm across. *Column* 4-5 mm long, curved away from the ovary at 50° at the base then erect, red brown. *Column wings* c. 1.8 mm long; basal lobe deltate, c. 0.7 mm long, c. 0.6 mm wide, reddish, at an angle 80°; apex broadly obtuse; inner margins adorned sparsely with short, white cilia; mid-section c. 0.6 mm long, reddish; apical lobe obliquely erect or curved, filiform, c. 0.7 mm long, acute. *Anther* c. 1 mm long, obtuse. *Pollinia* narrowly linear, c. 1 mm long, yellow, mealy. *Stigma* situated basally, scutiform, c. 1.5 mm long, c. 1.3 mm wide, raised. *Capsules* erect, narrowly ellipsoid, 7-9 mm long, 3-4 mm wide.

Distribution and ecology: Known with certainty only from two sites, one in Mount Mee State Forest in the D'Aguilar Range west of Caboolture in south-eastern Queensland and the other in the Nerang State Forest inland from the Gold Coast, but probably more widespread than this. At Mt Mee it grows on ridges in open forest with a sparse shrubby understorey and apparently also colonises road embankments (R.Crane pers. comm.). In the Nerang State Forest it grows on a sheltered bank in open forest dominated by *Corymbia maculata* (B.Dalyell pers. comm.). Soils are shallow stony or clay loams, or shaley loam. Alt. 400-550 m. Flowering: April to July.

Recognition: Characterised by autumn-winter flowering period; rosettes appearing late in anthesis or after anthesis; dull green rosette leaves (to 16 x 12 mm); relatively short, wiry scape; foliose sterile bracts; 1-5-flowered inflorescence; widely-spaced flowers, 7.5-9 mm long, 3-3.5 mm wide, green and white at the base, bright red towards the apex; densely scabrous dorsal sepal; sinus side view curved, sharply stepped in at the top; sinus frontal opening flat with a small medial notch; tapered free points that reach the top of the galea; and, an elliptic pale red and white labellum, 3-3.5 x c. 1.5 mm, not visible from the exterior in any position.

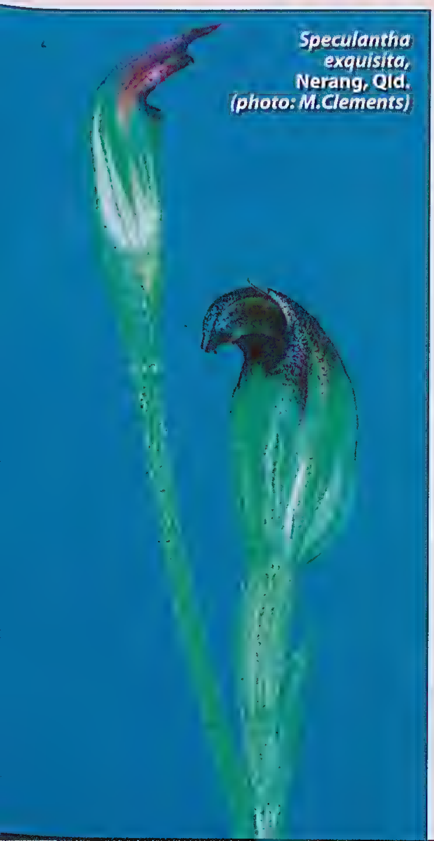
Similar species: A very distinct species with similarities to *S. furva*. That species however, is readily distinguished by its much larger flowers that are mainly dark brownish to brownish-black and white and its oblong to oblong-obovate labellum with a broad square base.

Notes: This species has relatively small but distinctively coloured flowers.

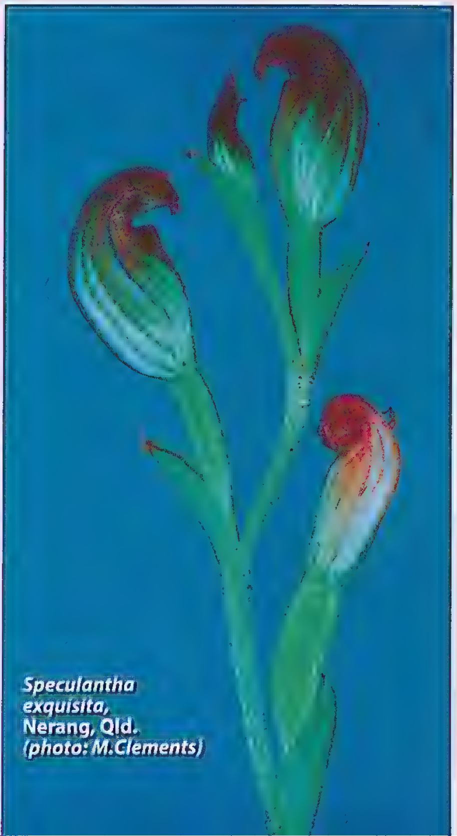
Conservation status: Poorly known, possibly of restricted distribution and not conserved; suggest 2EK by the criteria of Briggs & Leigh (1996).

Etymology: The Latin *exquisitus*, exquisite, choice, excellent, in reference to the attractive flowers and neat habit of the species.

Other specimens: QUEENSLAND: Mt Mee State Forest, 19 July 1995, *R.Crane s.n.* (CANB); Nerang State Forest, 9 May 2001, *B.Dalyell (ORG 3455)* (CANB).



Speculantha exquisita, Nerang, Qld. (photo: M.Clements)



Speculantha exquisita, Nerang, Qld. (photo: M.Clements)

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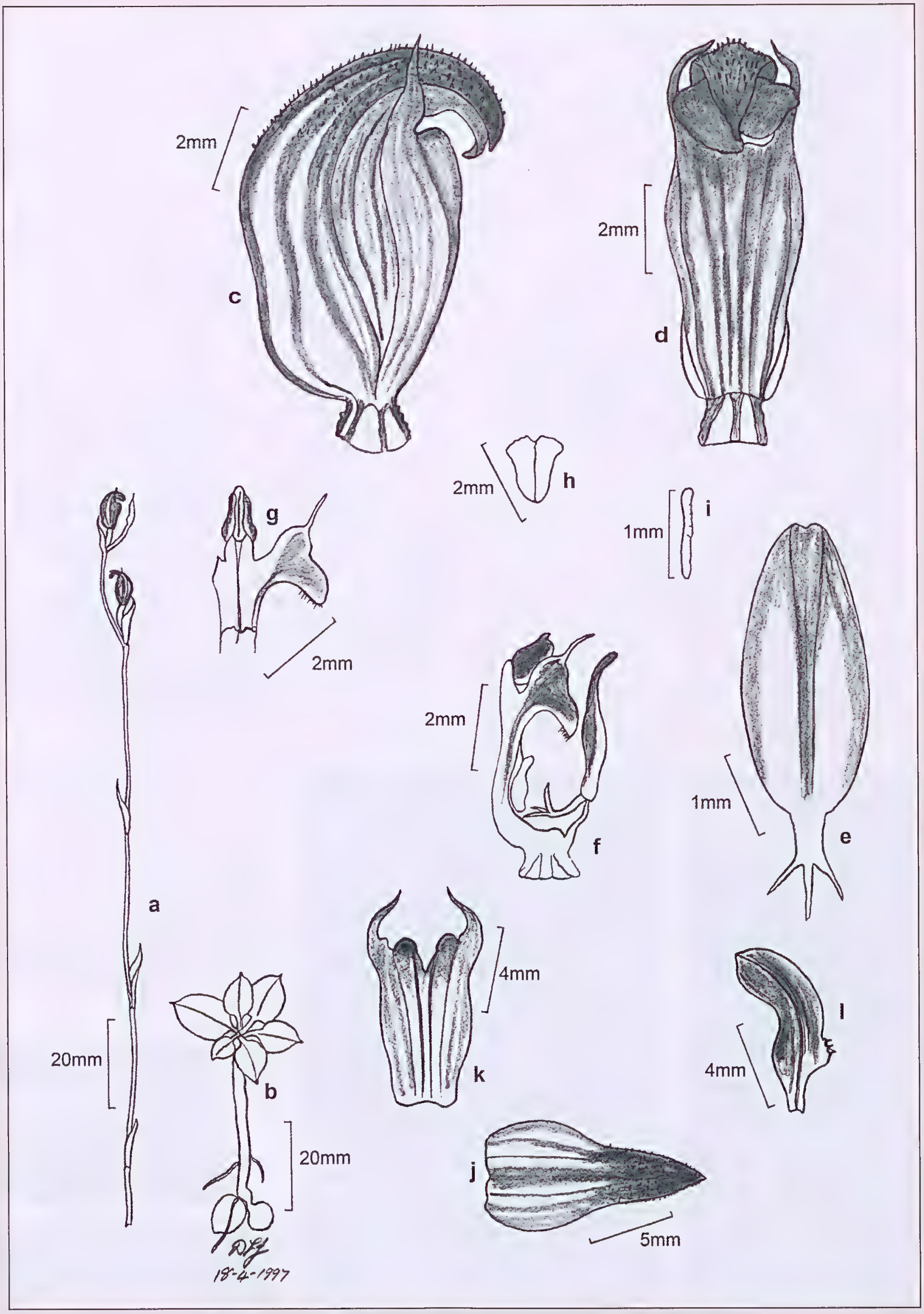


Speculantha exquisita*, Mt Mee State Forest, Qld, *R.Crane 1832
a. flowering plant; b. rosette; c. flower from side; d. flower from front; e. labellum; f. column and labellum from side; g. top of column from front; h. stigma; i. pollinium; j. dorsal sepal; k. synsepalum; l. petal. © **D.L.Jones, 18 April 1997**

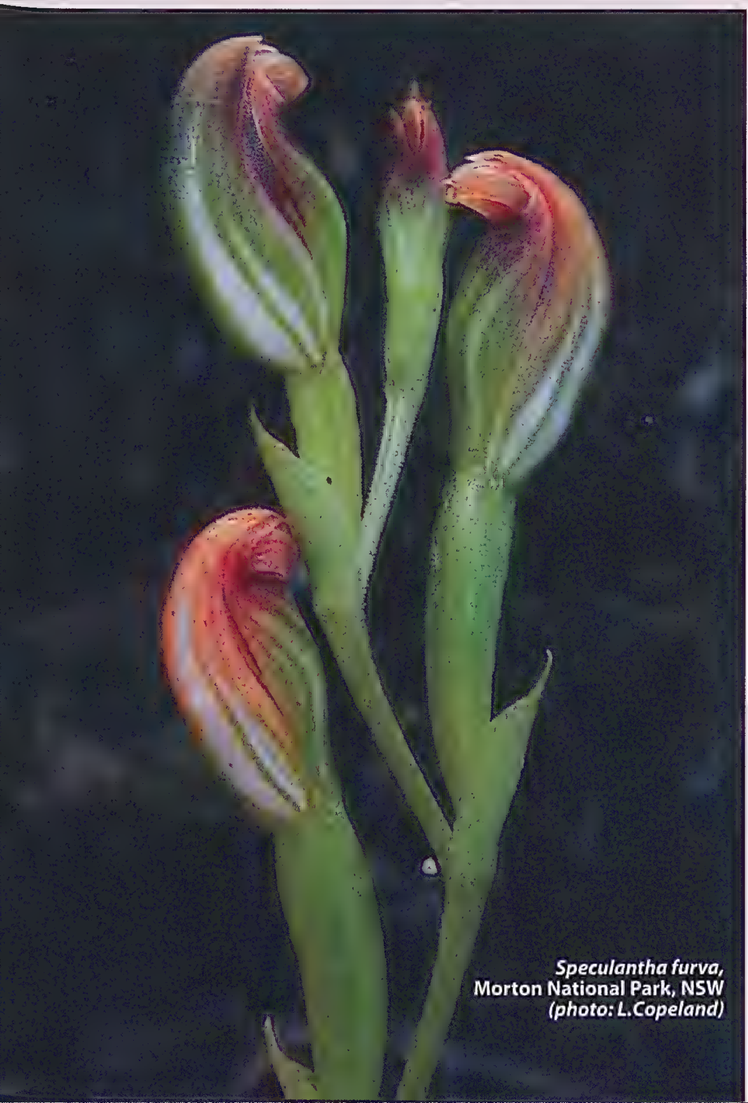
5. *Speculantha furva* D.L.Jones, ***sp. nov.*** With affinity to *Speculantha parviflora* (R.Br.) D.L.Jones & M.A.Clem., but differing by its bluish-green rosette leaves, larger dark brown to blackish and white flowers, scabrous dorsal sepal (smooth in *S. parviflora*), and a broader labellum not visible from the exterior of the flower; also with *Speculantha rubescens* D.L.Jones but differing by its fewer and smaller rosette leaves, smaller darker brown to blackish flowers and smaller oblong to obovate labellum (broadly elliptical in *S. rubescens*).

Type: New South Wales. Manning Lookout near Robertson, *D.L.Jones 3735, & R.G.Tunstall*, 4 March 1989 (holo CANB 196072; iso AD, MEL, NSW).

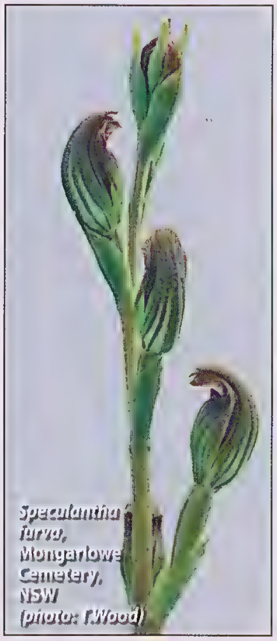
Description: Glabrous, tuberous, terrestrial *herb*. *Plants* 10-30 cm tall, not elongating in fruit. *Rosettes* 1-3, usually absent at anthesis, borne on lateral growths from the base of the scape. *Rosette leaves* 3-7, spreading; lamina ovate to cordate or sagittate, 5-15 mm long, 6-12 mm wide, bluish-green, dull; petioles 4-11 mm long, narrowly winged. *Scape* slender, 1-8-flowered. *Sterile bracts* closely sheathing, linear-ovate, 4-5, 8-15 mm long, 4-5 mm wide, acuminate. *Floral bracts* similar, 4-10 mm long, 3-4 mm wide, acute to acuminate. *Flowers* well spaced, 1-4 open at once, 9-10 mm long, 3-3.5 mm wide, dark brown to brownish-black and white, dull, darkest towards the apex; *galea* inflated, curved near base then erect before curving forwards in a semi-circle; petals longer than the dorsal sepal, the distal part of the dorsal sepal prominently scabrous. *Dorsal sepal* ovate-lanceolate when flattened, 10-13 mm long, 7-8 mm, inflated at the base then tapered, boldly striped, darker towards apex, acute to subacute. *Lateral sepals* erect, closely embracing the galea; side view shallowly curved, curving inwards at the top; sinus frontal opening flat with a shallow central notched; conjoined part 6-7 mm long, 3.5-4 mm wide, narrowed to c. 1.5 mm across at the base, brown with lighter stripes, the upper margins dark brown; free points c. 2 mm long, triangular, sharply tapered, acuminate, about as high as the galea although often curved forwards. *Petals* oblong-lanceolate, 8-10 mm long, 2-2.3 mm wide, strongly falcate, dark brown with white stripes, a dark brown patch on the lower anterior side. *Labellum* erect, not visible through the sinus in any position, shallowly curved forwards near apex, red brown and white. *Labellum lamina* oblong to oblong-obovate with a broad square base, 3.5-4 mm long, c. 1.5 mm wide, obtuse; basal appendage decurved, c. 1 mm long, broadest at base (0.4 mm wide); apex erect, trifid. *Callus* a raised, central reddish-brown ridge c. 0.4 mm across. *Column* 3.5-4.5 mm long, curved away from the ovary at 50° at the base then erect, dark brown. *Column wings* c. 1.2 mm long; basal lobe c. 0.7 mm long, c. 0.5 mm wide, brown, at an angle of 60°, inner margins adorned sparsely with short, white cilia; apex obtuse; mid-section c. 0.8 mm long, dark brown; apical lobe obliquely erect, linear, c. 1 mm long, entire, obtuse to subacute. *Anther* c. 1 mm long, obtuse. *Pollinia* linear, c. 1 mm long, yellow, mealy. *Stigma* situated centrally, scutiform, ca 2 mm long, c. 1.5 mm wide, raised. *Capsules* erect, ellipsoid to obovoid, 11-13 mm long, 4-5 mm wide, greenish-brown.

Distribution and ecology: This species is restricted to sandstone areas south of Sydney, more or less between Royal National Park and Nowra, inland to the vicinity of Mongarlowe. It grows among shrubs in sparse forest in moderately deep, well-drained sandy and gravelly soils; also in moss pads on shallow sandy soils over sandstone sheets and ledges. Alt. 50-750 m. Flowering: January to April.

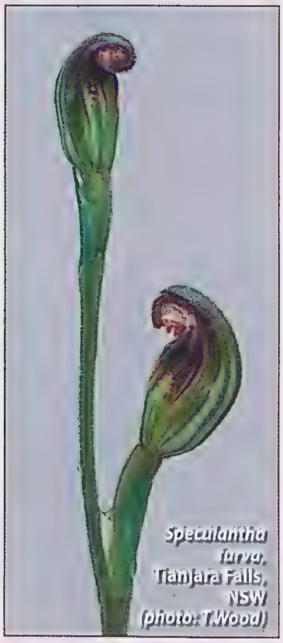
Recognition: Characterised by summer-autumn flowering period; rosettes appearing late in anthesis or after anthesis; dull bluish green rosette leaves (to 15 x 12 mm); tall, wiry scape; sheathing sterile bracts; 1-8-flowered inflorescence; well-spaced, plump flowers, 9-10 x 3.5-4 mm, dark brown to brownish-black and white, dull, darkest towards the apex; scabrous dorsal sepal; sinus shortly stepped inwards, flat with a shallow median notch when viewed from the front; triangular-tapered free points that don't reach the top of the galea; and, an oblong to oblong-obovate, red-brown and white labellum with a broad square base, 3.5-4 x 1.5 mm, the tip not visible from the exterior in any position.



Speculantha furva, Morton National Park, NSW (photo: L.Copeland)



Speculantha furva, Mongarlowe Cemetery, NSW (photo: T.Wood)



Speculantha furva, Tianjara Falls, NSW (photo: T.Wood)

Similar species: *Speculantha furva* is somewhat similar to *S. rubescens* but much less robust with smaller and fewer rosette leaves and smaller flowers with an oblong to obovate, red-brown and white labellum with a broad square base. *S. rubescens*, which is very robust and grows taller with up to 18 flowers, forms large crowded rosettes with more numerous and larger leaves (up to 15 leaves per rosette; leaf size to 25 x 18 mm), more numerous larger flowers (to 12 x 5 mm) and, a broader, elliptical labellum (to 4.5 x 1.8 mm).

Notes: This species occasionally grows sympatrically with *S. parviflora* but hybrids are unknown.

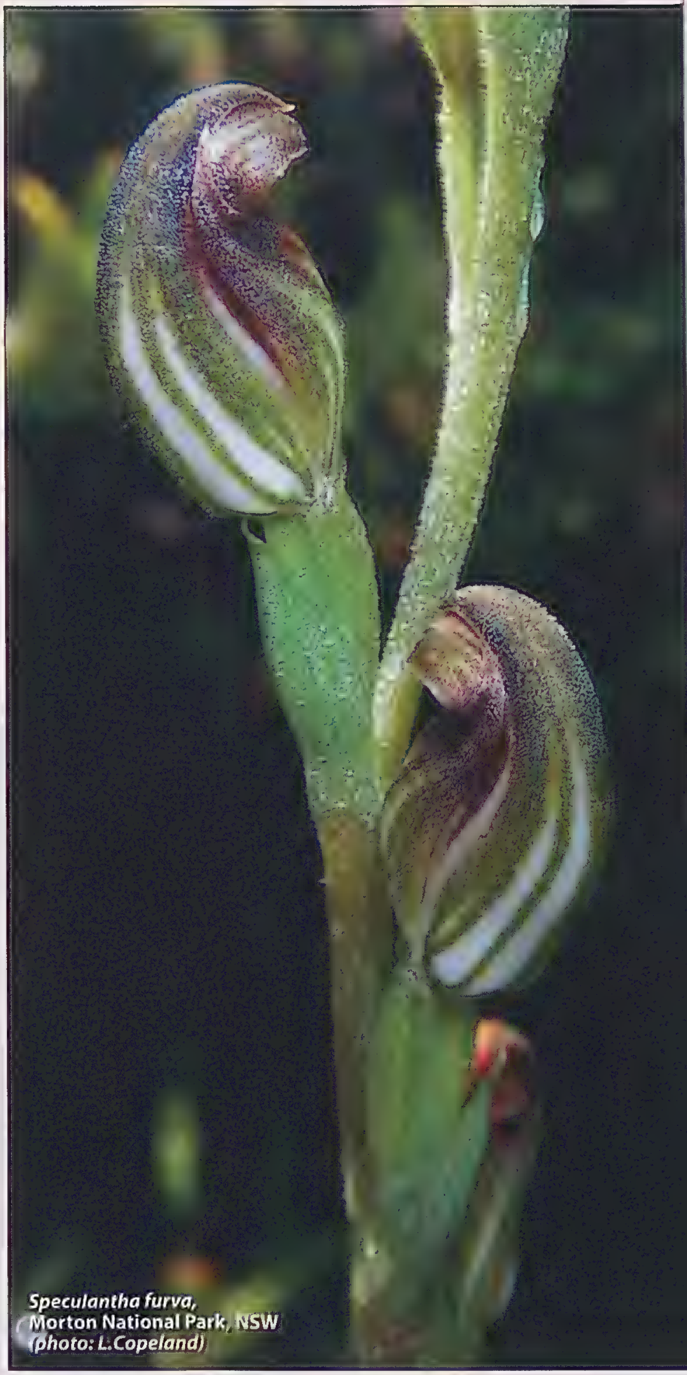
Conservation status: Moderately widespread, locally common and conserved.

Etymology: The Latin *furvus*, dark, dusky, swarthy, black, in reference to the dark flower colour, often almost black.

Other specimens: NEW SOUTH WALES: Royal Natl. Park, 3 June 1991, *A.D.Bishop & J.F.Keller (D.L.Jones 7484)* (CANB); Mongarlowe, Mar. 1909, *J.L.Boorman* (NSW); Red Hill, Paddington, May 1901, *E.Cheel* (NSW); Barren Grounds, 23 Feb. 1986, *M.A.Clements 3986* (CANB); Tianjara Falls, Morton Natl. Park, 16 Apr. 2002, *M.A.Clements 10655 & K.Gowland* (CANB); Uloola Track, Royal Natl. Park, 13 Apr. 1969, *R.Coveney 1021* (NSW); Cape Solander, Kurnell, 21 Apr. 1969, *R.Coveny 1037* (MEL, NSW); Georges River, Apr. 1946, *A.Dockrill* (NSW); Waterfall, 4 May 1947, *A.Dockrill* (NSW); Manning Lookout, 2 Apr. 1988, *D.L.Jones 2571 & R.G.Tunstall* (CANB); Robertson, 4 Mar. 1989, *D.L.Jones 3744* (CANB); Barrengary Mountain, 14 Mar. 1990, *D.L.Jones 5733* (CANB); c. 1.5 km from Nowra turnoff on Braidwood-Nowra Road, 21 Mar. 1990, *D.L.Jones 5771 & C.H.Broers* (CANB); c. 19.1 km NW of Braidwood on road to Nowra, 16 Feb. 1992, *D.L.Jones 9036 & B.E.Jones* (CANB); c. 5.6 km E of Endrick River crossing towards Nowra, Morton Natl. Park, 16 Feb. 1992, *D.L.Jones 9039 & B.E.Jones* (CANB): Yarran Road, Yerriyong, 13 Mar. 2002, *D.L.Jones 18220 & A.Stephenson* (CANB); Waterfall, 15 May 1949, *M.W.Nichols* (NSW); Mongarlowe, 24 Feb. 2001, *D.Rouse (ORG 3336)* (CANB); Charleys Forest Road, near Mongarlowe, 24 Feb. 2001, *D.Rouse (ORG 3343)* (CANB); Fitzroy Falls, 18 Mar. 2001, *D.Rouse (ORG 3403)* (CANB); National Park, 14 May 1927, *G.Scammell* (NSW); Pittwater, 12 May 1929, *G.Scammell* (NSW); Charleys Forest near Braidwood, 12 Mar. 1909, *G.Webb* (NSW); Jamberoo Mountain, 26 Jan. 1968, *B.Whitehead* (CANB); Jervis Bay Naval Reserve, 21 May 1964, *J.H.Willis* (MEL).

Acknowledgements

Much appreciation to Anna Monroe, Emma Thoms, Marion Garrett and Karina Richards for technical assistance and help with specimens at CANB; also the directors and curators at AD, BRI, CANB, NSW and QRS for allowing access to specimens. Special thanks to Jean Egan for preparing my drawings for publication, Bruce Dalyell and the late Ralph Crane for supplying living specimens from Queensland and Mark Clements for access to photos of type collections. Photos of flowers were supplied by David Banks, Mark Clements, Lachlan Copeland, Jeff Jeanes, John Roberts and Tony Wood.



***Speculantha furva*, Morton National Park, NSW (photo: L.Copeland)**

References

- Bishop, T. (2000) *Field Guide to the Orchids of New South Wales and Victoria*. 2nd edition. (University of New South Wales Press: Sydney).
- Briggs, J.D. & Leigh, J.H. (1996) *Rare or Threatened Australian Plants*, revised edition, (CSIRO: Collingwood).
- Jones, D.L. & Clements, M.A. (2002). A Review of *Pterostylis* (Orchidaceae), *Aust. Orch. Res.* 4: 1-168.
- Jones, D.L. & Copeland, L.M. (2014). *Speculantha amabilis* (Orchidaceae: Pterostylidinae), a new species of Tiny Greenhood from the Northern Tablelands of New South Wales, *Aust. Orch. Rev.* 79(5): 51-54.

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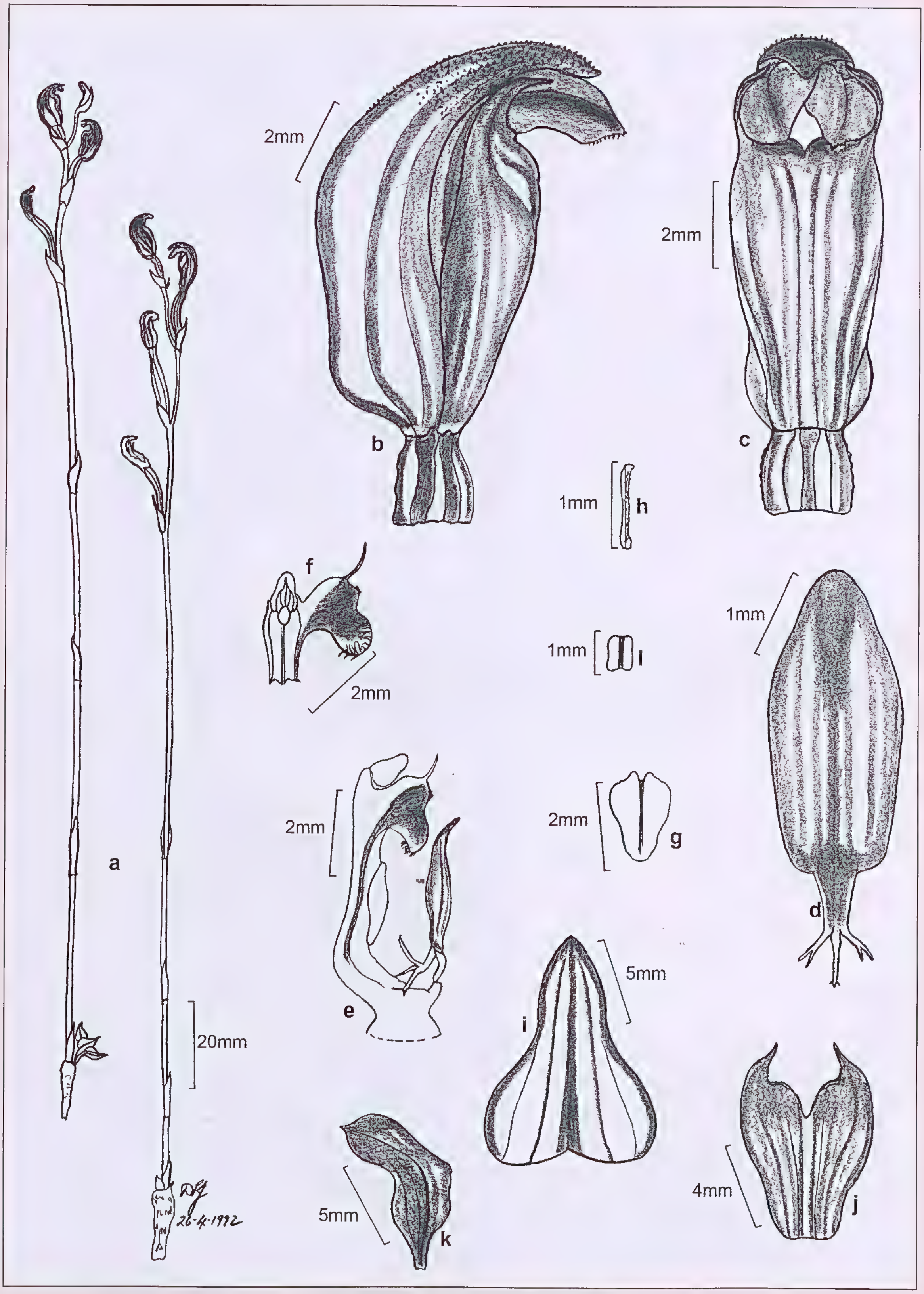


***Speculantha furva*, Warumbul, NSW**

a. flowering plants; b. flower from side; c. flower from front; d. labellum; e. column and labellum from side; f. top of column from front; g. stigma; h. pollinium; i. dorsal sepal; j. synsepalum; k. petal; l. labellum hinge. © **D.L.Jones, 26 April 1992**

A new fire stimulated Leek Orchid from South Australia

by Robert J. Bates

Abstract: *Prasophyllum asinantum*, an obligate fire ephemeral leek orchid is here described as new. Notes are provided on its distribution, ecology and conservation status; its distinguishing features are compared with those of allied taxa.

Key Words: Orchidaceae, *Prasophyllum asinantum*, new species, South Australia, Australian flora.

Introduction: Despite being known since the 1970's this fire stimulated ephemeral orchid was first collected and photographed by members of the Native Orchid Society of South Australia (NOSSA) in September 2013, half way between Desert Camp and Kingston, nine months after a hot summer fire burnt ten square kilometres of bush. It is the first of many undescribed and mostly rare South Australian *Prasophyllum* leek orchids to be named in a series of papers due for publishing over the next few years.

Materials and methods: The description of the new species was made from fresh specimens. Types of all *Prasophyllum* species relevant to this paper were examined at AD.

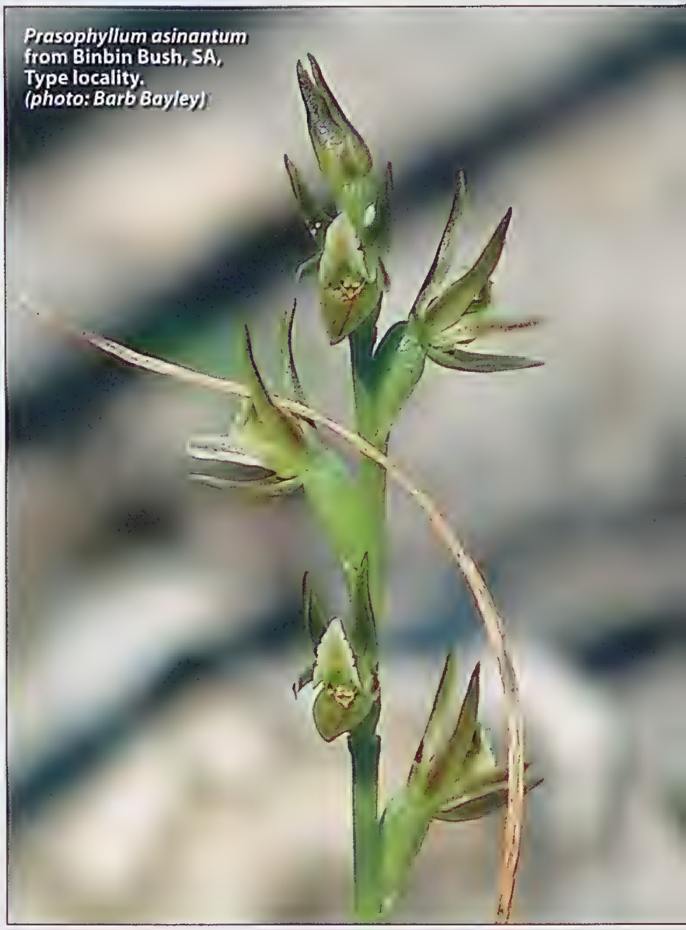
Taxonomy: *Prasophyllum asinantum* R.J. Bates ***sp. nov.*** with affinities to *Prasophyllum occidentale* R.S. Rogers but differing in its more slender habit, fewer, narrower, less colourful *flowers*, the *lateral sepals* free and divergent with entire apices, *dorsal sepal* not decurved, *petals* strongly incurved, *labellum* cream coloured, *callus* glabrous, reaching almost to the labellum apex.

Type: South Australia, mid Southeast, Binbin Station heritage bush east of Binbin Rd via Desert Camp Road, 15th Sept. 2013, *R. Bates 91076* (holo AD).

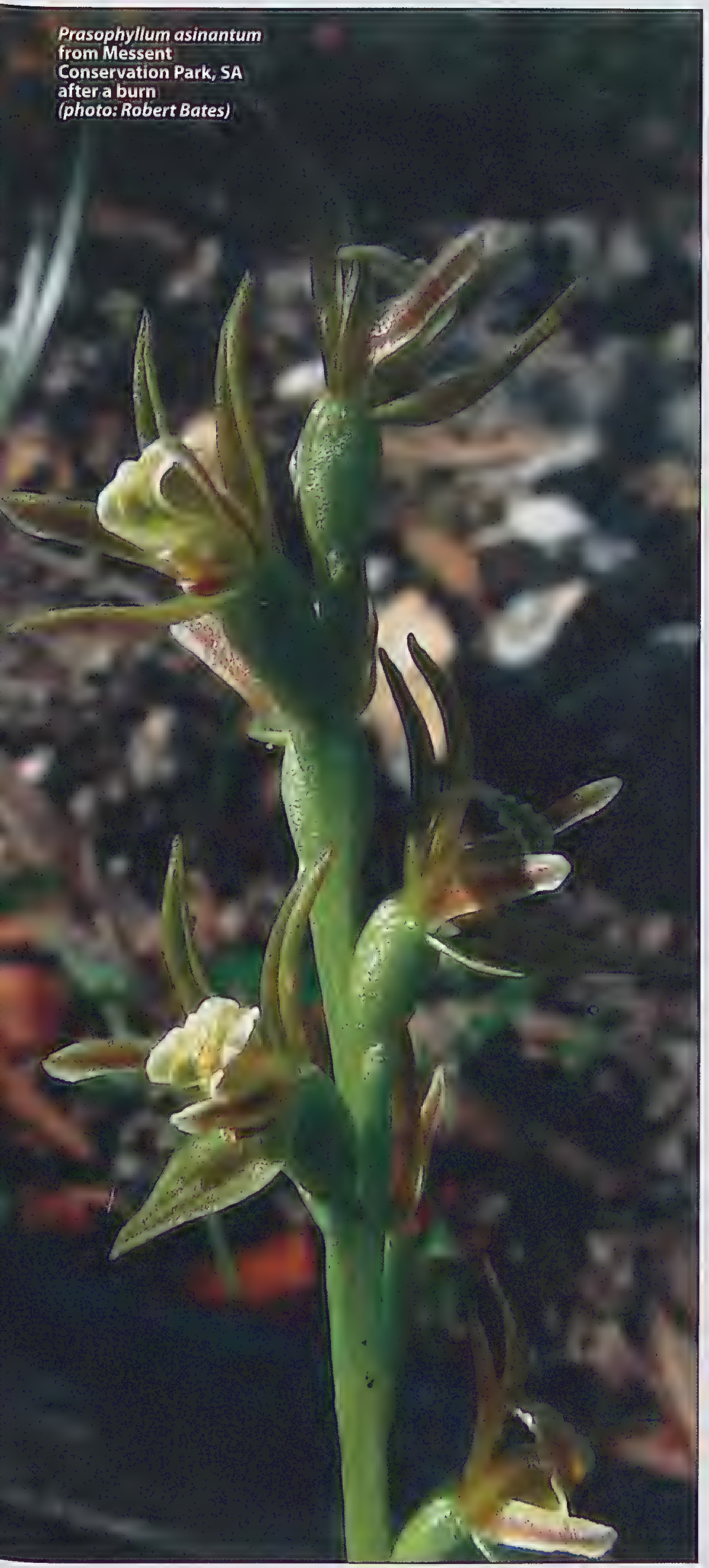
Illustration: first published here as colour photograph and line drawing.

Description: *Terrestrial, slender, tuberous orchid* 10-18 cm tall; *tuber* globular to 15 mm diam.; *leaf* cylindrical, erect, enclosing the scape for at least half its length, to 18 cm long and 0.8-1 mm diam. *Scape* as long as leaf, green with a red base, rigidly erect, c. 1 mm diam without bracts. *Flowers* 1-5, sub-sessile greenish-brown, c. 5 mm wide; *subtending bract* quadrate, obtuse c. 1 mm long by 0.8 mm wide, green; *ovary* ovoid c. 5 mm long by 3 mm diam, 4 ribbed, green. *Sepals* 5-6 mm long, green with tan median stripe, acute; *dorsal sepal* ovate to 3 mm wide, dished, horizontal, apex straight; *lateral sepals* lanceolate, free, except at their base, erect, divergent, to 1 mm wide, slightly recurved, apex entire; *petals* c. 3 mm x 1 mm, oblong lanceolate, similar in colour to sepals but pale edged, parallel on either side of the labellum base. *Labellum* sessile, ovate-cuneate, to 8 mm long by c. 2 mm wide , cream and green, basal half horizontal, oblong, apical half erect, triangular, *margins* crenulate, *lamina* glabrous, with a yellow green callus plate to 3 mm long by 1.5 mm wide, broadly channeled at base with a narrow tapering apex, reaching almost to labellum tip. *Column appendages* thumb like, white to 0.2 mm long, *anther* brown shallow, *stigma* indistinct, *rostellum* large, *pollinia* granular, mid yellow, attached directly to the viscid disk.

Distribution and ecology: only known from the mid to upper Southeast of South Australia, on and adjacent low limestone rises on Mallee covered plains from Big Heath to Gum Lagoon and Mount Boothby conservation parks. Like many other members of the genus has been observed flowering only after summer bushfires and due to the tiny leaves of non-flowering plants is unlikely to be located otherwise. The flowers are sweetly fragrant and outcrossing (not self-pollinating). Associated orchids include *Prasophyllum elatum*, *Pyrorchis nigricans* and *Thelymitra azurea* all of which rarely flower without fire. It is possible that the species is much more widespread and may even occur in adjacent parts of Victoria.



Prasophyllum asinantum from Binbin Bush, SA, Type locality. (photo: Barb Bayley)

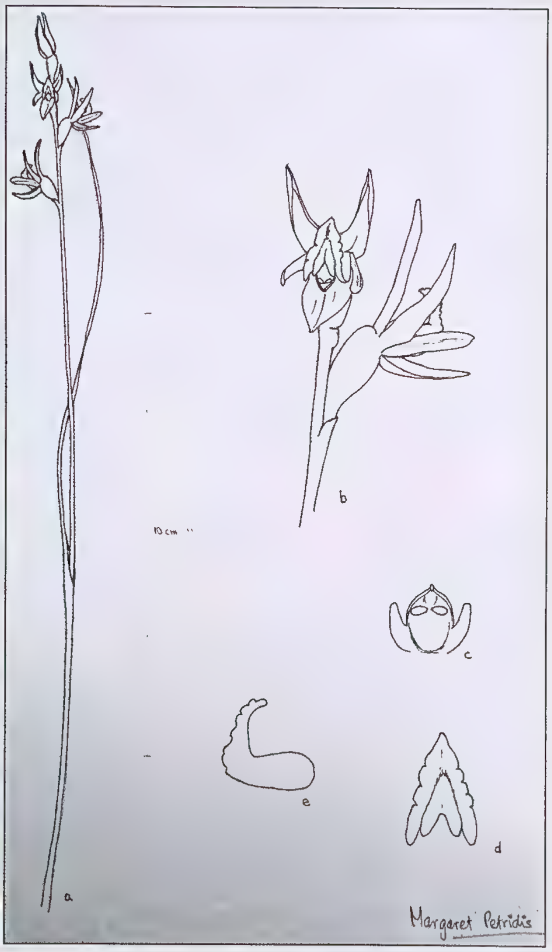


Prasophyllum asinantum from Messent Conservation Park, SA after a burn *(photo: Robert Bates)*

Recognition: Characterised by the delicate, few flowered plants with their dull green and brown tints, the slender divergent lateral sepals and the crenulate cream coloured labellum lamina and smooth tongue shaped callus with its shallow basal groove.

Similar species: Resembles *Prasophyllum occultans* which is a strongly self pollinated species from the *Prasophyllum fitzgeraldii* complex and is a much stockier plant with larger flowers and some pubescence on the labellum lamina. *Prasophyllum occidentale* is usually more robust and has conjoined, bidentate lateral sepals and variably coloured flowers often with pink labellum. All these species are sweetly perfumed.

Notes: The new species is sympatric with two other undescribed leek orchids of uncertain alliance, which grow in adjacent sand heath and pipe-clay flats and will be published in a forthcoming paper. The author's studies of *P. occidentale* mentioned above reveal that as currently circumscribed it is actually a complex of at least five taxa several of which are likely be published in the next few years.



Prasophyllum asinantum
a. whole plant, b. two views of a flower, c. column,
d. labellum front view, e. labellum side view.
(line drawing © by Margaret Petridis SA.)

Conservation status: As its habitat was common pre settlement it was probably once abundant. Unfortunately 80% of its habitat was cleared in the 1960's and early 1970's (pers. obs.) and it is now likely to be at least rare.

Etymology: The Greek *asinantum* means 'insignificant' reflecting the unspectacular and short-lived nature of the plants which are difficult to see even when their habitat has been opened up by fire.

Acknowledgements: Much appreciation to NOSSA members for their ability to locate plants and sharing images, particularly Barb Bayley and June Niejalke and also to Margaret Petridis who provided the illustration at short notice. Thank you also to Novi who provided technical support and Lorae West, Librarian at AD.

Reference:

- Bates R. J. & Weber J.Z. (1990) *Orchids of South Australia,* Govt Printer South Australia.

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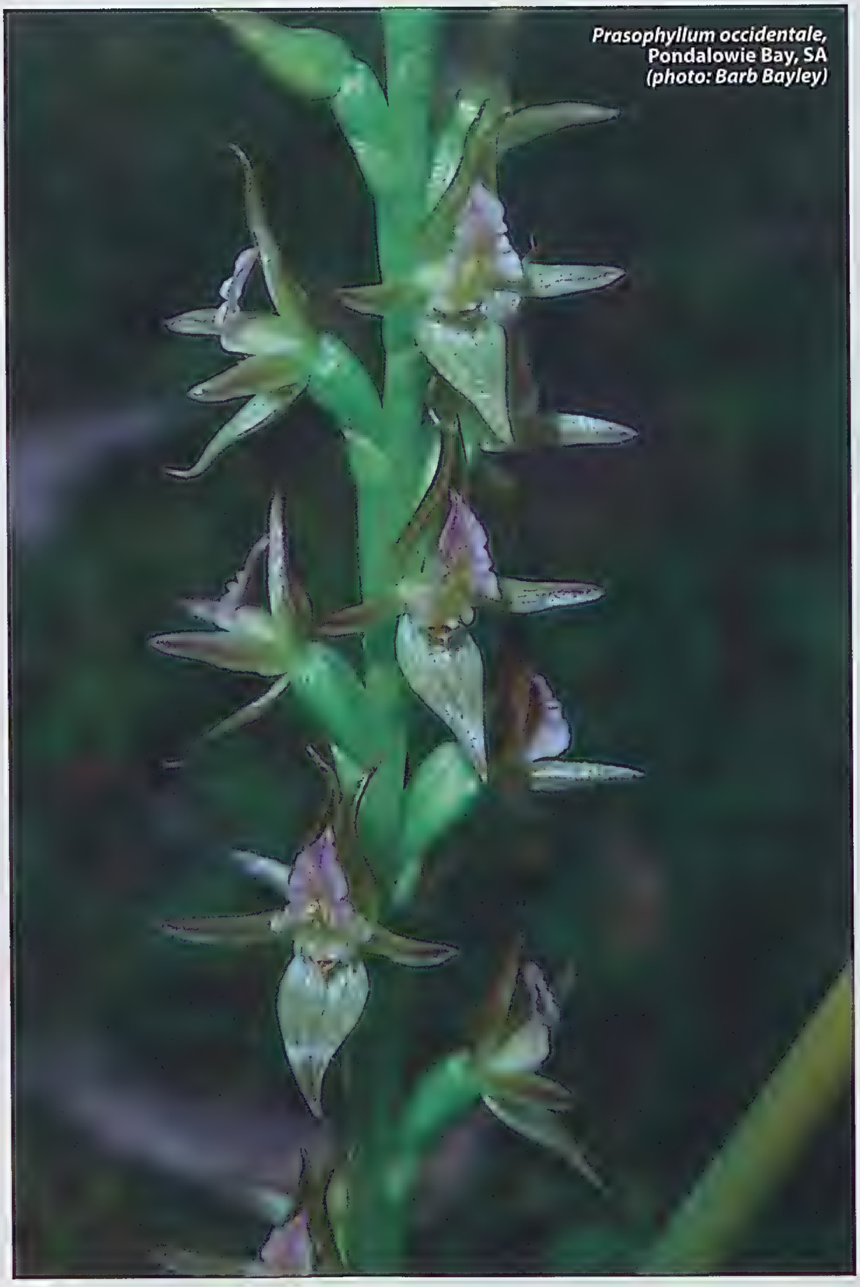

Prasophyllum occidentale,
Pondalowie Bay, SA
(photo: Barb Bayley)

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by Alan W. Stephenson

Alan Stephenson lives in Nowra and is well placed to give the first botanical treatment of the native orchids of the Shoalhaven region. He has extended the distribution ranges of a number of uncommon and rare species, as well as discovering new taxa. This 68 page book is packed with both information and superb photography, almost exclusively taken by the author. All of the recorded orchid species native to the region are included and illustrated.

The introductory chapters discuss the area covered by this book, the structure of the orchid plants, their natural habitats, parts of an orchid flower, orchid structure and the pollination of orchids. This is followed by the main section of the book that alphabetically lists and discusses each species, with information such as Common Names, Recent Synonyms, Flowering Time in the wild, plus a brief description of the plant, flowers and preferred habitat. There are many terrestrial species fully covered as well as a number of epiphytic and lithophytic genera that are found in the area.

The quality of the printing and colour reproductions are sparking. This is a wonderful field guide that will aid even the most novice naturalist or native orchid enthusiast and confidently assist them in identifying examples they encounter in the field. It represents excellent value, as it also covers many species found naturally along the East Coast of New South Wales.

68 pages,
225 colour photos.
210mm x 148mm.
Softcover.

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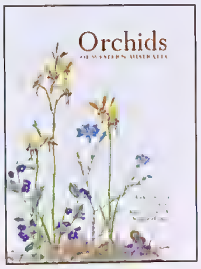
ORCHIDS OF WESTERN AUSTRALIA

by Andrew Brown, Pat Dundas, Kingsley Dixon & Stephen Hopper



Written by three of Western Australia's most prominent orchidologists and featuring over 200 full-page, colour illustrations by renowned botanical artist Pat Dundas, *Orchids of Western Australia* is the first modern text cataloguing all 409 known species.

This comprehensive resource for hardened enthusiasts and initiates alike features a wealth of information in a single volume – from a detailed introduction to WA orchids to information on each species, including who named them, where they were first collected, their habitat, distribution, flowering period, size and distinguishing features. This book is the culmination of decades of work by WA's foremost experts, each dedicated to the conservation of one of the world's most important regional orchid floras.

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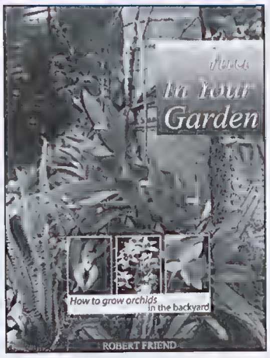

## ORCHIDS IN YOUR GARDEN

How to grow orchids in the backyard

by Robert Friend

It sounds too good to be true, but orchids are as easy to grow in the backyard as a lawn or a bed of roses. Despite their exotic reputation, the everyday gardener can grow orchids without special pots or greenhouses.

The book shows you how to introduce orchids into the garden, by attaching them to trees, fixing them on rocks and walls, or planting them in garden beds. With more than 150,000 species and hybrids of orchids in the world, there are plants suitable for every garden.

Robert Friend draws on a lifetime's experience with orchids to explain how to choose the right orchid for your climate and how to landscape orchids in different types of gardens. Ranging from tropical to cool climate areas, from large acreages to small courtyard gardens, almost every backyard can enjoy the best of one of nature's wonders.

144 pages.
Colour and B&W.

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THE ALLURE OF ORCHIDS

by Mark A. Clements

From 1788 when First Fleet artist George Raper painted *Diuris punctata*, the botanical world has been fascinated by Australian orchids. Hundreds of orchid images from the National Library of Australia's collection, with words by Mark Clements from the Australian National Herbarium in Canberra, make *The Allure of Orchids* a must-read for lovers of flowers, original paintings and our indigenous orchids. Many of these unique botanical illustrations are being showcased to a wider audience for the very first time.

The Allure of Orchids features an essay by internationally recognised orchid expert Mark Clements, accompanied by a portfolio of illustrations, both historical and modern, of this alluring species. In it you will find works by around 25 artists, including the extraordinarily detailed lithographs of early botanical illustrator Ferdinand Bower, Ellis Rowan's beautiful paintings, the delicate watercolours of Margaret Cochrane Scott, and many more.

The Allure of Orchids is divided into two parts; Terrestrial or ground orchids and Epiphytic or tree dwelling species. Clements says, "These illustrations can be enjoyed simply as works of art and part of our rich and colourful Australian illustrative heritage. But, significantly, they are also part of the scientific record of this country, particularly during the early exploration of the continent."

Interestingly, a lot of the old and traditional Latin botanical names have been used in this work. The author makes a significant number of anecdotal notes and comments throughout the book, to keep the reader fully informed. It is a "must have" book for those interested in Australian orchids and historical botanical art.

159 pages, colour.
284mm x 233mm.
Hardcover.

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ORCHID: THE FATAL ATTRACTION

by Anne Ronse

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The subject of orchids is one close to the heart of many floral designers. some feel it's a privilege to wo[illegible]ith these flowers and plants [illegible]der how many desi[illegible] investigate the [illegible]em rather than just [illegible] them. The text by Dr Anne [illegible] is informative and enthusiastic and the photography is superlative! It's so good that the flowers literally drip off the pages capturing the imagination and the heart. If you want something special, are addicted to orchids and want to luxuriate in glorious text and images; this is the book for you.

142 pages. Colour. Hardcover.

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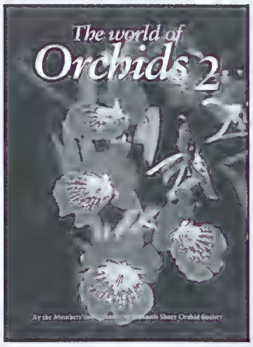
The world of Orchids 2
By the Members and friends of the North Shore Orchid Society

THE WORLD OF ORCHIDS – 2

The World of Orchids – 2 has been written by members and friends of the North Shore Orchid Society about orchids grown in Sydney and its environs, and we are indebted to those people for their time and effort.

It has been produced to cover a large range of genera to help not only the novice, but also the experienced grower in their present fields of interest, and to tempt and encourage them to try other genera.

It should be pointed out that the methods of culture used by the authors are those which they themselves have found successful. Growers should try any changes to their own culture gradually and on a few plants first, as orchids respond differently under different conditions.

80 pages. Colour and B&W.

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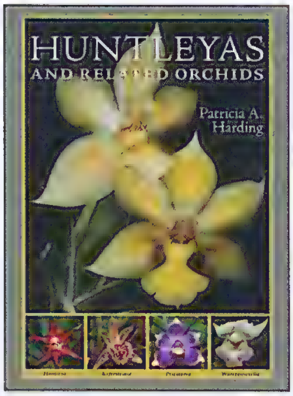

HUNTLEYAS AND RELATED ORCHIDS

by Patricia A. Harding

Revered by avid orchid collectors for its delightful, star-shaped flowers, *Huntleya* is a small group of orchids found low in the forest. *Huntleya* is a small orchid genus that includes fourteen species. They occur in wet cloud forests at medium altitudes of Guatemala, Costa Rica, South America down to Bolivia. The type species *Huntleya meleagris* also occurs in Trinidad. Besides their striking colours — from deep blue to waxy red, royal purple to almost black — flowers of this group are known for their distinctive shapes, patterns, and textures. As appealing as these lovely tropical orchids are, their identification has been confused since the first species was described in the mid-1800s. Recent DNA studies have led to a clearer understanding of relationships and, as a result of this clarity, it is now possible to sort out the taxonomic problems and identify the characteristics that set species apart. In this first book devoted to the *Huntleya* alliance, author Patricia Harding presents evidence from the scientific literature, other growers, and her own experience that will enable orchid enthusiasts everywhere to identify their plants and grow them successfully. Patricia A. Harding is an accredited American Orchid Society judge who has been growing and photographing orchids for three decades.

260 pages, 150 colour photos. Hardcover.

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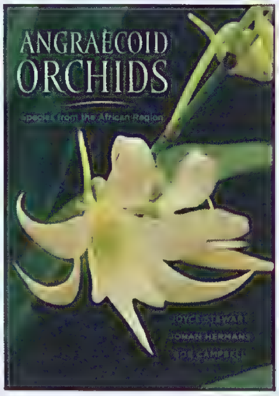

ANGRAECOID ORCHIDS: Species from the African Region

by Joyce Stewart, Johan Hermans, and Bob Campbell

These so-called 'Jewels of Africa' with their sparkling flowers, distinctive growth habit and floriferous nature are much prized and this account, the first to include the Angraecoid orchids of both Africa and Madagascar, is long awaited. It brings together, in a single volume, descriptions of all 690 species in this intriguing group of orchids and will be the essential reference for all Angraecoid orchid enthusiasts for years to come. Including such horticulturally important genera as *Angraecum*, *Aeranthes*, *Aerangis* and *Jumellea*. Stewart, Herman and Campbell have all spent time in various parts of eastern and southern Africa and precise ecological information relating to habitat, altitude preferences and flowering season of individual plants will be particularly helpful to growers. The diagnostic features of each genus are illustrated and over half the species are accompanied by exquisite photographs taken in both wild habitats and in cultivation.

432 pages, 290 colour photos. 185mm x 265mm. Hardcover.

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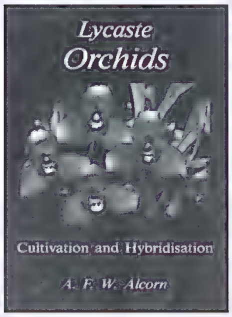

LYCASTE ORCHIDS - Cultivation and Hybridisation

by A.F.W. Alcorn

Lycaste orchids are easy to grow, and they produce flowers that range from the beautiful to the bizarre. No book previously has provided detailed cultural requirements of the Lycaste, and this book should fill that gap, and encourage new growers to take up the cultivation of this beautiful genus. A section on hybridising contains valuable information on inheritance and genetics that will benefit any hybridiser, not just the grower of Lycastes, as well as helpful hints on how to avoid pitfalls in your hybridising program. Michael Hallett, a friend of Fred Alcorn for a number of years, co-wrote this book with Fred and has completed it posthumously. He has a background in genetics, research and botany, and a passion for plants, especially orchids.

237 pages. Colour and B&W.

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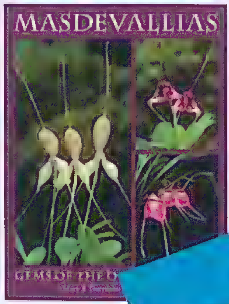

MASDEVALLIAS: Gems of the Orchid World

by Mary E. Gerritsen and Ron Parsons

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For the species orchid enthusiast, cool to intermediate orchid grower [illegible] anyone simply "mad about Masdev[illegible] a first complete reference to [illegible] world orchids. An ins[illegible] and a practical [illegible]ook offers detailed advice [illegible]ulture. For those enthusiasts who [illegible] a challenge, chapters on propagating, [illegible]owing, and registering Masdevallias are also included. Ron Pa[illegible] one of the finest nature photographers in the world and has an encyclopaedic knowledge of species orchids, with the genus *Masdevallia* being one of his favourites.

300 pages, 149 colour photos. 190mm x 255mm. Hardcover.

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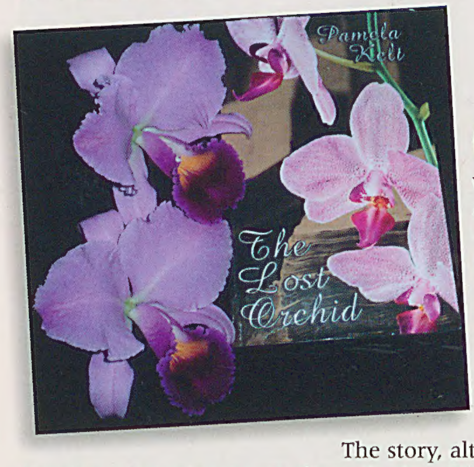
NEW ON THE BOOKSHELF:

The Lost Orchid

by Pamela Kelt

Book Review by
Art Chadwick



Orchid hobbyists, who are curious about the early days of the sport, will get a kick out of a new 301-page paperback book called *The Lost Orchid*, by Pamela Kelt.

The story, although fiction, is based on factual accounts from the late 1800's in England. The author has, no doubt, spent countless hours researching old newspapers and botanical journals in order to give us an insider's view of what it must have been like to operate an orchid business during this swashbuckling time period.

A retired plant hunter named John McPhairson runs an impressive enterprise called McPhairson's Nurseries – "Veritable Kingdom of Orchids" - in Warwickshire, England with rows of glass greenhouses and a conservatory. He knows orchids very well, having travelled the jungles in search of rare plants for decades. He is quite opinionated and "judges a man by the orchids he keeps."

His niece, Flora McPhairson, has fond childhood memories of playing games in the greenhouses. After being jilted on her wedding day, she returns to the nursery to work and discovers much more than mere flowers. She also longs for a man who is currently deep in the wilderness looking for new species. She reads a letter from him, "I have found a truly remarkable *Cattleya* in bloom. It has a mystic quality that suggests a great past or a marvellous future."

Readers are introduced to old-time orchid auctions in which vast sums of money are bid on the latest epiphytes brought in from the wild – maybe a single plant, maybe large lots. Ten thousand specimens of *Odontoglossum crispum* are being offered. Frenzied bidders have to trust the companies making the claims as the out-of-bloom plants may not be what they say they are.

John McPhairson is pioneering the concept of orchid hybridizing – creating a new 'strain' by cross breeding two naturally occurring species. This new idea is being met with mixed reviews. While his loyal clients can't wait to see what the new flowers look like, others are sceptical and protest on religious grounds saying that "hybrids are an aberration of nature." His competitors must think he is onto something because they are doing everything possible to steal his pollination secrets.

Along the way, we learn about a high society event called a "Grand Flowering" in which a lavish party is thrown for a new orchid's blooming. We also witness a booby-trapped stud house in which scorpions are released when a stranger is detected as well as a rival's attempt to wipe out a prized *Cymbidium* crop with an infestation of insects.

The Lost Orchid is just one of seven intriguing novels by Pamela Kelt who lives in Kenilworth England. I thoroughly enjoyed reading this book and she has promised a sequel. www.pamelakelt.weebly.com

The Lost Orchid is available through www.bluewoodpublishing.com as a paperback ($13.99) or may be downloaded in kindle format ($2.99) at www.amazon.com ■

Art Chadwick
Chadwick & Son Orchids Inc
Richmond, Virginia, USA
Email: art@chadwickorchids.com

New Combinations in the Pterostylidinae (2)

by David L. Jones

The following new combinations in the Pterostylidinae are necessary to allow for the different taxonomic views held at generic level within the subtribe!

Pterostylis antennifera (D.L.Jones) D.L.Jones, **comb. nov.** Basionym: *Speculantha antennifera* D.L.Jones, *Austral. Orch. Rev.* 80(4) 41, fig. (2015).

Pterostylis clivosa (D.L.Jones) D.L.Jones, **comb. nov.** Basionym: *Speculantha clivosa* D.L.Jones, *Austral. Orch. Rev.* 80(4) 45, fig. (2015).

Pterostylis crebra (D.L.Jones) D.L.Jones, **comb. nov.** Basionym: *Speculantha crebra* D.L.Jones, *Austral. Orch. Rev.* 80(4) 48, fig. (2015).

Pterostylis exquisita (D.L.Jones) D.L.Jones, **comb. nov.** Basionym: *Speculantha exsquita* D.L.Jones, *Austral. Orch. Rev.* 80(4) 51, fig. (2015).

Pterostylis furva (D.L.Jones) D.L.Jones, **comb. nov.** Basionym: *Speculantha furva* D.L.Jones, *Austral. Orch. Rev.* 80(4) 53, fig. (2015).

2015 ORCHID EVENTS – *What's on!*

August 1-2 WA Orchid Society
– Workshop & Show – Perth, WA

August 14-16 St. Ives Orchid Fair
– Sydney, NSW

September 12-13 Wyong Springtime Orchid Show
– Wyong Racecourse, NSW

September 12-13 ANOS Warringah Group
– Forestville, NSW

September 17-19 Parramatta & District Orchid Society (Orchid & Clivia Show)
– Winston Hills Mall, NSW

September 19-20 ANOS Sydney Group
– Eden Gardens, North Ryde, NSW

September 18-22 Orchids in Paradise
– Mackay, QLD

September 24-26 Casino & District Orchid Society "50th Anniversary Show"
– Anglican Parish Hall, Barker St, Casino, NSW

September 26 Plant Lovers Fair
– Kariong, NSW

September 26-27 Geelong Orchid & Indoor Plant Club
– Christ Church Hall, Geelong, Victoria

September 27 Hills District Orchids
– Spring Open Day – Northmead, NSW

October 2-4 Southern Orchid Spectacular
– Cronulla, NSW

October 2-4 Southern Orchid Spectacular
– Cronulla, NSW

October 17 ANOS Sydney Group Sarcochilus Show
– Community Church, West Pennant Hills, NSW

October 17-18 ANOS Illawarra Group
– Old Courthouse, Wollongong NSW

October 17-18 ANOS Central Coast Group
– Penrose Nursery & Aquarium, Erina, NSW

October 17-18 ANOS Newcastle Group Sarcochilus Show
– Gateshead Bowling Club, Windale, NSW

October 31 Tweed Orchid Fair
– Gold Coast, QLD

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Venue Boxhall Pavilion, KCC Park (State Dog Centre)
655 Westernport Highway, Skye VIC 3977

Times Friday 28 August 9 am – 5 pm
Saturday 29 August 9 am – 5 pm
Sunday 30 August 9 am – 4 pm

Entry Adults $10 Concession $8 Children under 15 Free

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